The American Artisan
And Hardware Record

58. No. 1. CHICAGO, JULY 3, 1909. $2.00 Per Year.

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TURN BUCKLES

full line of Bolts, Bolt Ends, Rivets, Lag Screws, Nuts, Washers and Carriage Hardware.

COLUMBUS BOLT WORKS,
COLUMBUS, OHIO.

The Standard of Merit

"AMERICAN SEAL"

Elastic Oil Roofing Cement.
Stove Putty and Asbestos Furnace Cement.
THE LIVE LINE for Furnaces, Stoves, Ranges and Roofs

JOBBERS WRITE TODAY FOR PRICES

The WM. CONNORS PAINT MFG. CO.
Makers, TROY, N. Y.

Eastern Agents: Friedley-Voshardt Co. 194 Mather St., Chicago, Ill.
Southwestern Agents: Stockhoff Supply Co. 167 N. Main St., St. Louis, Mo.

Iwans' Volcano Revolving Chimney Top

Sizes 6 to 12 inches. Sold by jobbers of Hardware and Tinners' Supplies.

Notice one of its **Strong Features.** The upward sloping opening in back of hood creates a constant upward draft, no matter how depressing the atmosphere.

You need it for some of your customers' chimneys.

Send postal for catalogue.

IWAN BROTHERS
Mfrs. of Hardware Specialties
SOUTH BEND, IND.

"To discontinue an advertisement," says Ex-postmaster-General John Wanamaker, one of the largest advertisers in the world,—and, naturally enough, one of the most successful business men,—"is like taking down your sign. If you want to do business you must let the people know it. I would as soon think of doing business without clerks as without advertising."

"NEVER-BREAK" TRADE MARK

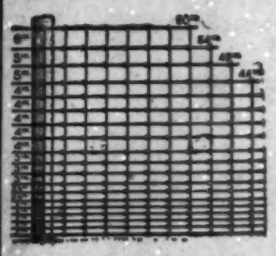
Catalog Free

"NEVER-BREAK"

STEEL SPIDERS, GRIDDLES AND KETTLES

WILL NOT
Scale Off like cheap enamel.
WILL NOT
Scorch or Burn like light fry pans and skillets.
WILL NOT
Absorb Grease or Flavors like cast iron.

THE AVERY STAMPING CO.
CLEVELAND, OHIO
Sole Manufacturers
"NEVER-BREAK" Goods



The Denning Fence

¶ Is the Fence that pleases your customer. It is made on scientific and practical principles. It is made in various sizes, weights and meshes, for stock, hogs, poultry and rabbits.

Write for catalog and prices on Lawn and Cemetery Fencing, Gates, Barb Wire, Nails, Staples, Portable Corn Cribs and Grain Bins.

The Denning Wire & Fence Co., Cedar Rapids, Iowa.

MATCHLESS

Spring and Pivot Hinges, Floor Hinges, Jamb Hinges and Hardware Specialties

☞ The Matchless Jamb Hinge is well made of either steel, brass or bronze metal, single and double acting, in all sizes and finishes—for light and heavy doors. Our goods are all of the highest quality. If your jobber cannot furnish them, write us.

LAWSON MFG. COMPANY
40 Dearborn Street, CHICAGO, ILL.

TS200
A7

This is the furnace the thoughtful man will buy to
WARM HIS "HOME, SWEET HOME"
The one place above all others where he wants things right.

THE ETNA FURNACE

IS A FURNACE OF VISIBLE VALUE

You can show your customers, and they can see that you are showing them

A FURNACE THAT IS

Lower in height than any return flue furnace with equal fire travel.

A FURNACE THAT HAS

Its casings so proportioned that every part of the furnace has the proper amount of air passing over it.

A FURNACE THAT IS MADE OF

The kind of iron that has life, vitality and free radiating properties.

You can buy it in its 27 and 30 firepot sizes much cheaper than any furnaces of equal weight—and the smaller sizes enough cheaper to be interesting.

FIRE POTS	CASING	HEIGHT
18"	36"	47"
21"	40"	48"
24"	46"	52"
27"	52"	52"
30"	60"	55"

STOVE AND RANGE COMPANY OF PITTSBURGH

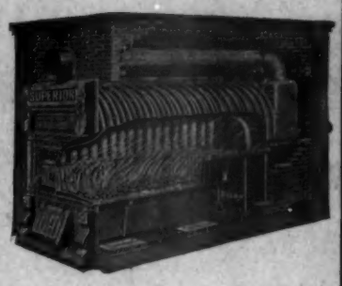
GOOD VALUES IN STOVES PITTSBURGH, PENNSYLVANIA

Superior Furnaces
Imperial Boilers

"The Coal Savers"

The Line for every ambitious heating contractor to handle for 1909 and 1910 and every other year.

Prompt shipments at all times from either Utica or Chicago Stocks.



Utica Heater Company
Utica, N. Y.

Chicago Branch, 105 Lake St., Chicago, Ill.

The Symbol

A New Air Tight Heater for Coal or Wood

This is a fine large heater, made of the best materials by skilled workmen and is bound to satisfy all the time.

CONSTRUCTION

Draw center grate for coal or wood. Heavy cold rolled steel body. Cast top with large 8-inch cover. Large square feed door 10½ x 12½ inches. Heavy cast bottom, deep hearth with ash pan. Heavy cast outside lining, 8 inches high, which answers for a fire-pot and prevents the steel jacket from warping.

This heater will hold fire as long as any stove made. It is well dressed, the name plate, rings, foot rails, draft damper and urn top being handsomely nickeled.

THE SYMBOL is without an equal on the market for this class of heater.

Write for our complete catalogue of Stoves and Ranges.

We manufacture as complete a line of Hard and Soft Coal Heaters and cast and steel ranges from the highest grade down to the cheapest as any other stove manufacturer in the country.

We have ready a handsome line of Steel Box Stoves (new).

Sheridan Stove Manufacturing Company

Quincy, Ill.

Foster's REGAL

A Profitable Stove to Handle

¶ FOSTER'S REGAL is a good substantial Oak heater nicely finished and sells at a very low price for a stove of its class.

¶ It has a shaking grate with draw center, large ash pan and is surmounted by a handsome urn.

¶ The drum is made of blue polished steel.

¶ As shown by the cut the parts are nicely nickeled and the stove makes a handsome appearance. FOSTER'S REGAL is just as good as it looks

¶ We want one agent in every town and would be pleased to receive inquiries from live, progressive dealers.

The Foster Stove Company
IRONTON, OHIO

VAN'S

Patent Improved
Wrought Steel Portable

RANGE

For Hotels, Restaurants, Public Institutions, Boarding Houses and Private Families. All kinds of Hotel Implements for culinary purposes. Manufactured and for sale by

The
JOHN VAN RANGE CO.
Southwest Corner
5th and Broadway
CINCINNATI, - OHIO

THE MONITOR RADIATOR

¶ Dealers who handled this stove last year declare that it is **the most rapid seller they ever handled**; and not only that, but they report—**Every Customer Satisfied**—as well.

¶ You should investigate it at once.
¶ Make it your head-liner this fall.

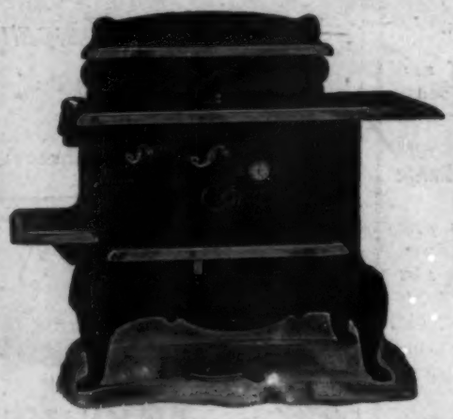
Points for Consideration

1.—Front part of stove always the hottest.
2.—A feature not to be found in any other make.
3.—Heat is radiated into center of room direct.
4.—No other stove does this.
5.—Fire passes down the 5 front flues, then under stove, and up the back flue to chimney.
6.—No stove ever made but the **MONITOR** did this.
7.—We guarantee 1683 square inches of radiation more than furnished by other makes.
8.—This stove furnishes all this additional heat with the same amount of fuel used in other makes.
9.—In addition to the above the **MONITOR RADIATOR** has hot air flues of 946 square inch capacity, which can be conducted to heat rooms above or utilized in heating the rooms on lower floor.
10.—**Best Heater Ever Produced.** Convince yourself.

Write for Complete Descriptive Matter. *One Agent Wanted in Each Town.*

The Monitor Stove & Range Co.
Manufacturers
CINCINNATI, OHIO

Sectional View.



The Greatest Coke Burning Stove the World Ever Saw

CONTROL

IT WILL BURN COAL AS WELL

Send for Booklet for full particulars

Albany Foundry Company, Albany, N. Y.

BANNER QUALITY

This is a range of unquestioned merit and individuality.

It is handsomely designed, made of the best materials, free from defects of any nature and carefully and honestly constructed—in fact a first-class range in all respects.

It will sell because it is just what your customers want, a range that can be depended upon at all times, a range that sells at a price which is right and a range that cooks and bakes to perfection.

Mr. Dealer—You should handle it, there's money in it for you. Write for further particulars.

Quality Stove & Range Co., Belleville, Ill.

Munsell's Mica

EUGENE MUNSELL & CO.
NEW YORK AND CHICAGO

THE STANDARD FOR HIGH GRADE STOVES

THE PENN BARON

TRADE PENN MARK
REGISTERED

A modern base burner. Can be used as a double heater or parlor stove.

LOOKS WELL
HEATS WELL

Without exception it has given its every user complete satisfaction.

MADE IN THREE SIZES.

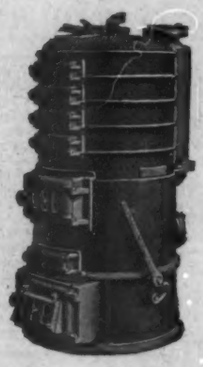
Write for catalog of the complete PENN line to-day.

MT. PENN. STOVE WORKS
READING, PA.
111-113 No. 2nd Street, - PHILADELPHIA, PA.

For More than a Generation

"Spence" Boilers

Have Been Giving Good Satisfaction.



"Spence" Boiler

(Over 65,000 in use)

MADE IN 5 STYLES—51 SIZES.

Efficient—Durable—Economical

Ask for Free Catalog.

Kellogg-Mackay Company

Heating and Plumbing Supplies

CHICAGO

MINNEAPOLIS SEATTLE

The Champion Interchangeable Gas Range

2 IN 1

The Range that does double the work of any other Gas or Coal Range

You can COOK, BAKE, ROAST and BROIL with Gas, Coal or Wood without *removing a burner*

More Economical than a Gas Range

Has six 8-inch cooking holes with reducing lids, two summer grates; oven, 18½ x 20½ x 14. Broiler 18½ x 20½ x 14. Warming closet of CHAMPION STYLE, body of polished steel, full asbestos lined. Made with the usual CHAMPION CARE.

A RANGE OF QUALITY, DURABILITY and ECONOMY

Write for Catalogue and Discounts

The Champion Steel Range Company
CLEVELAND, OHIO

Faultless Malleable Ranges have the FIVE ESSENTIALS: Design, Finish, Materials, Workmanship and Durability. Write for new catalog, "Range Reasons."

Faultless Malleable Stove Works, St. Charles, Ill.

HERE'S A SNAP FOR WIDE-AWAKE RANGE DEALERS

I am going to sell 1000 400-lb. six-hole steel ranges finished in Japan for not over

$15.00 Each

I'll sell the ranges too, so you'd better get in line and order now. These Ranges formerly retailed at $60.00 each. Send me a carload order and get my best cash discount, or I'll give dating to firms with satisfactory credit. What better proposition can you ask for, if you have a little capital, are sufficiently enterprising, and want to make money? Do You Know there is a big demand for the "Willard" Steel Ranges because they give perfect satisfaction, and don't cost too much? Then why don't you supply them?

WILLARD STEEL RANGES

are advertised in many leading publications, and the people know them and want them. Get my prices—It means profit DOLLARS—to you. Every sale leads to another. I can sell you a better range than you can buy ANYWHERE for the money, one that cooks well and bakes evenly and perfectly, and will last a lifetime, with proper care. Tell me how many ranges you can sell annually and I will make you a very interesting proposition. Agents Wanted.

WM. G. WILLARD, No. 119 Willard Bldg., 520 Chestnut St., St. Louis, Mo.

CUT THIS OUT

The American Artisan and Hardware Record
Daniel Stern, Publisher and Proprietor
355 Dearborn Street, CHICAGO

Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars for one year's subscription, or 50 cents in case we decide to discontinue.

NAME .....
ADDRESS .....
TOWN .....
STATE .....

Our Strictly New Furnace

Built to the Hour

A Powerful Perfect Worker

OUR NEW ONE

WHATEVER IS GOOD, NEW AND MODERN IN FURNACE MAKING HAS BEEN CONSIDERED IN THE PLANNING AND BUILDING OF THIS FURNACE. * HEAVY STEEL PLATE IS DESIRABLE FOR QUICK HEATING WE HAVE IT IN THE LARGE RETURN RADIATOR. * HEAVY CAST IRON IS DESIRABLE FOR DURABILITY IN FIRE SECTION, WE HAVE IT THERE. * LARGE DOORS ARE DESIRABLE, WE HAVE MADE THEM LARGE. * PROMPT RELIABLE ACTION IS ESSENTIAL, THEY ARE HERE CORRECTLY AFFORDED.

THERE IS NO MORE SATISFACTORY FURNACE THAN THIS. THEY MAY TIE IT BUT THEY CAN'T BEAT IT. HEAVY STEEL HIGH RETURN RADIATOR WITH CAST TOP AND BOTTOM. ASBESTOS PACKED JOINTS EVERYWHERE. BIG FIRE-POT, BIG ASH-PIT, BIG CLEAN-OUT, BIG DOORS GROUND TO PERFECT FITTING. HEAVY SEPARATE GRATE BARS. DUST TIGHT. GAS TIGHT. A VERY COMPLETE MODERN FURNACE THAT WILL SATISFY BOTH YOU AND YOUR CUSTOMERS

WALTER S. RAIT & CO.

211-213 Lake Street, CHICAGO, ILLINOIS.

Boynton's Square-Pot Crusader Furnace

IF YOU WANT A FURNACE

that will stand by your customer in the coldest winter weather, without constant attention, and will not eat up what ought to be a season's supply of fuel in two or three months, examine into the merits of the

BOYNTON SQUARE - POT FURNACES

You should have our Catalogue on file. A postal card brings it

Boynton Furnace Co.

147-149 Lake Street, Chicago **106 West 37th Street, New York**
230 Pacific Avenue, Jersey City

YOU CAN TALK BETTER

if you have something **Special** to talk about.

THE FAULTLESS SCIENTIFIC HEATER is sure to interest your customers.

It has **no equal** in several important respects.

It is **more durable** than any others of its class.

It will do **better work** than steam or water.

It gives **more heat** with **less fuel.**

It will furnish heat to **remote rooms.**

It has vastly **more radiating surface** than ordinary furnaces.

It **does not overheat** the air.

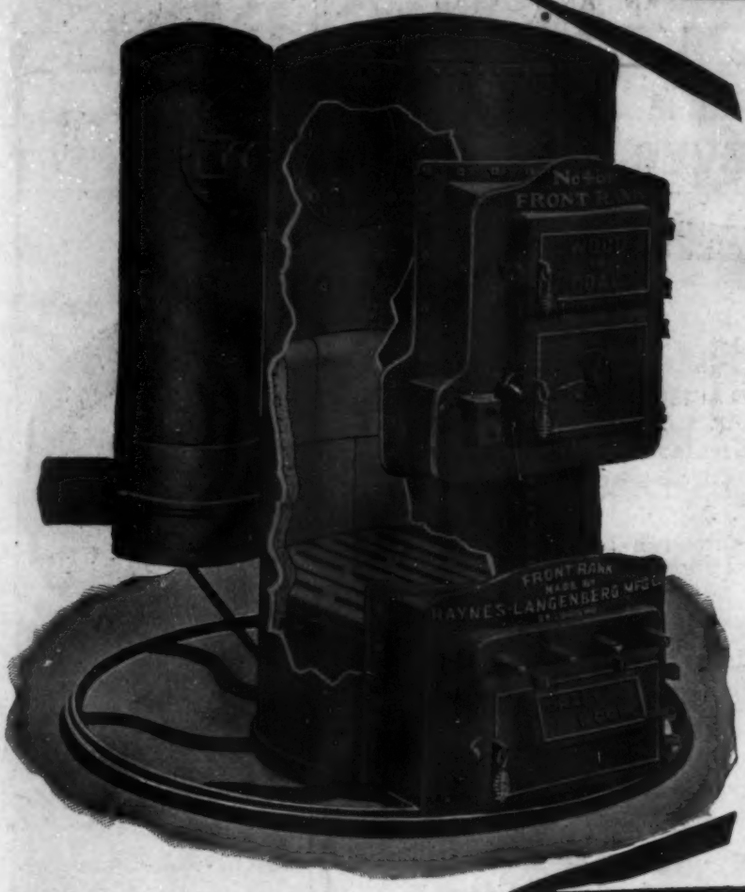
It is not in the **competitive** class.

It brings a good price because it is worth it.

Why not secure the **exclusive agency?**

A critical examination will convince you.

THE GRAFF FURNACE COMPANY, 208 Water St., NEW YORK



The

Front Rank Steel Furnace

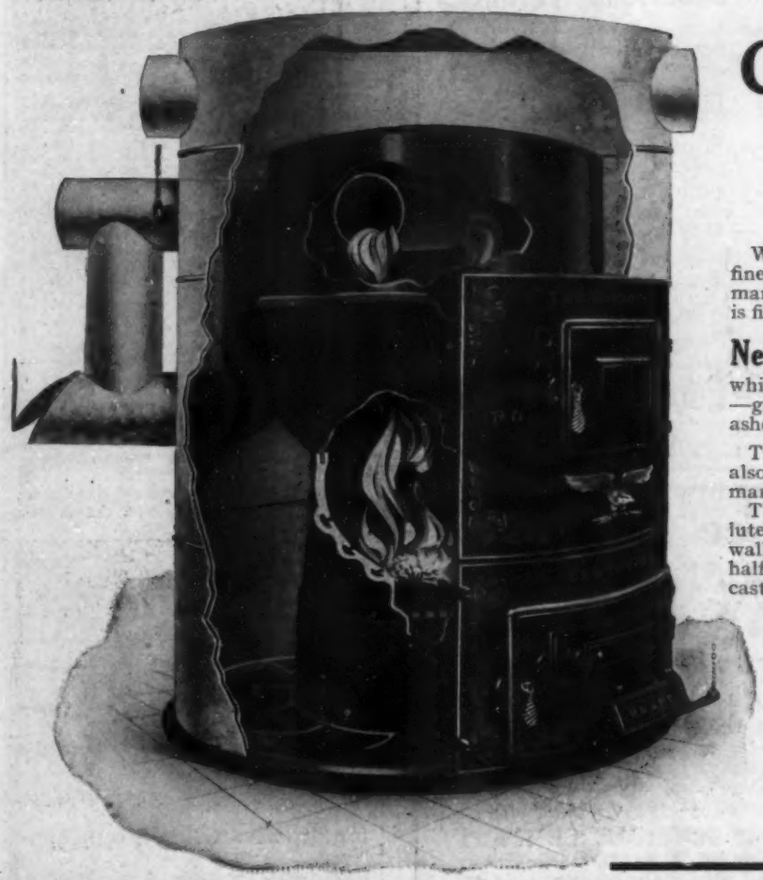
The result of **Twenty Years** of manufacturing experience and the most sensible and practical, durable and safe furnace on the market.

A heater with as many selling points of genuine merit has never been made.

1.—**Absolutely Gas Tight.**
2.—**Radiators Cannot Choke Up.**
3.—**Burns Any Kind of Fuel.**
4.—**Greatest Fuel Saver Ever Made**
5.—**No Direct Draft.**
6.—**Perfect Combustion Certain.**
7.—**12,000 Used in St. Louis Alone.**
8.—**Riveted Like a Boiler.**
9.—**Built on Straight Lines.**
10.—**Heats the House from Cellar to Garret.**

We can offer live dealers a mighty good Agency proposition. Our Catalog can be had for the asking.

Haynes-Langenberg Mfg. Co.
4045-4057 Forest Park Boulevard
ST. LOUIS, MO.



The

Canton Eagle

A New All-Cast

Furnace

We offer in this splendid new heater the finest all-cast furnace ever placed on the market. **The most modern and the best.** It is fitted with our

New Cellular Overdraft Firepot

which is larger at the bottom than at the top —giving at all times a clean fire surface as ashes cannot rest on sides.

This alone puts it in a class by itself, but it also has the new **Two Way Smoke Flue** and many other distinctive features.

The radiator of the **EAGLE** furnace is absolutely clean over its entire surface, and the walls are deeply fluted or corrugated giving half more heating surface than any ordinary cast radiator.

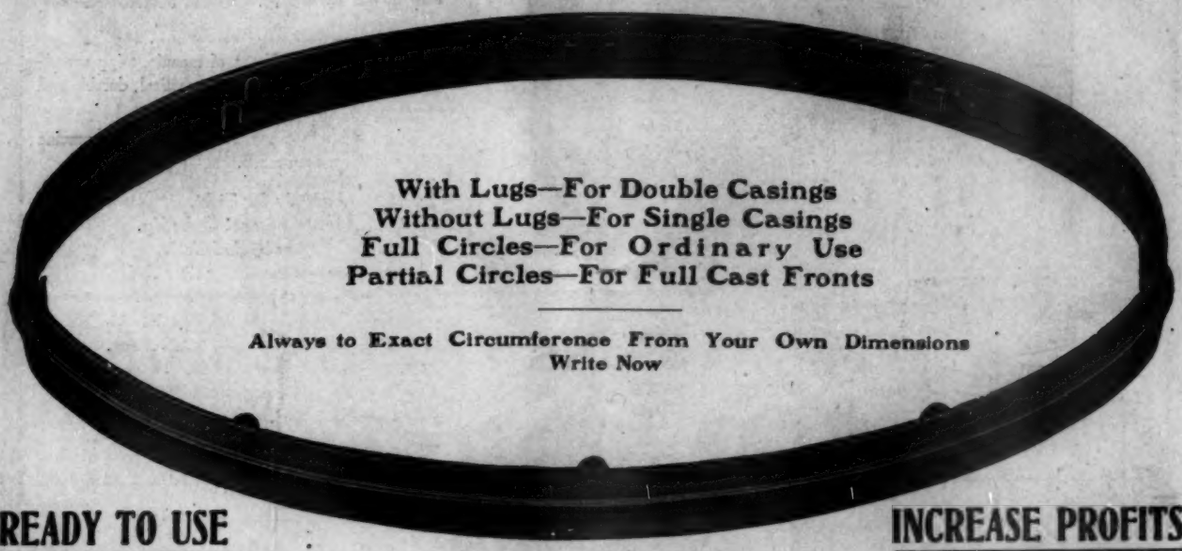
Our Catalog describes fully this unusual furnace. Ask us for a copy. We will be pleased to send you one.

The Bonnot Co.
Canton, Ohio

FURNACE CASING RINGS

Are Made to Conform to Individual Requirements in Every Respect

MADE OF STEEL NEVER BREAK CIRCLES PERFECT



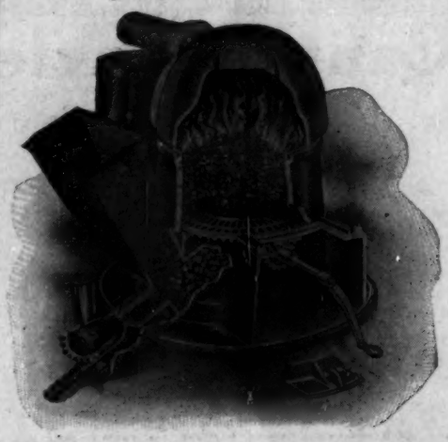
READY TO USE **INCREASE PROFITS**

THE WALWORTH RUN FOUNDRY CO.

Filmore, Talcott and West 27th Street, Cleveland, Ohio.

Largest Gray Iron Foundries. Estimates Furnished for Castings. Mfrs. of Semi-Steel Registers.

The Sprague and Western Underfeed Furnaces



are especially constructed to utilize all heat units in the coal.

¶ Smoke, soot and volatile gases are entirely consumed.

¶ They are reputation builders. Write for our catalog.

Sprague Foundry & Mfg. Co.
Council Bluffs, Iowa

Perfect Light for the Country Home

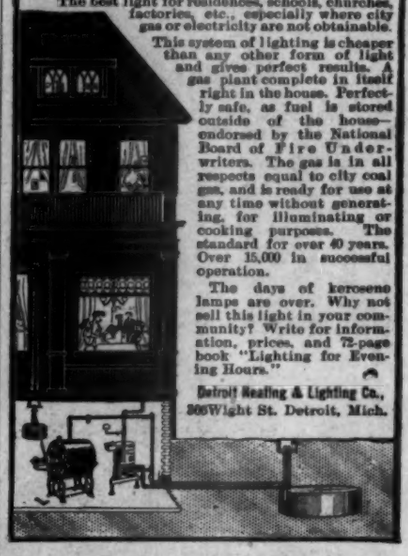
DETROIT Combination Gas Machine

Here is a lighting system that not only means good profits for you but it will give the most satisfactory service to your customers.

The best light for residences, schools, churches, factories, etc., especially where city gas or electricity are not obtainable.

This system of lighting is cheaper than any other form of light and gives perfect results. A gas plant complete in itself right in the house. Perfectly safe, as fuel is stored outside of the house—endorsed by the National Board of Fire Underwriters. The gas is in all respects equal to city coal gas, and is ready for use at any time without generating, for illuminating or cooking purposes. The standard for over 40 years. Over 15,000 in successful operation.

The days of kerosene lamps are over. Why not sell this light in your community? Write for information, prices, and 72-page book "Lighting for Evening Hours."



Detroit Heating & Lighting Co., 306 Wight St. Detroit, Mich.

A Good Furnace Business

can be built up in any community if the correct furnace is offered. One like the

MONCRIEF

TOP RETURN FLUE WARM AIR

FURNACE

guarantees a dealer all of the most particular contracts in his neighborhood.

Its Simplicity, Durability and Economy together with serviceability are prominent and meritorious features. *Write for our Catalog.*

HENRY & SCHEIBLE COMPANY
825-29 Long Ave., N. W., CLEVELAND, OHIO
J. C. KIMMEL, 3314 East 15th St., Kansas City, Mo. Western Sales Agent.

The human mind is so constructed that it is appreciably affected by repetition—and, after all, advertising is only repetition.—*Truman A. DeWeese.*

STOP—LOOK—LISTEN

Why waste time and money in setting up poor furnaces? Why not handle one that goes together **just right?**

The Ajax Does All This

and more. The castings fit perfectly. **No Filing Necessary.** A very high grade furnace at **moderate** price. You cannot afford to pass us by. We **can** and **will** save you money. Write for catalogue.

Co-operative Foundry Company

Rochester, N. Y.

Western Branch: 264 S. Clinton St., CHICAGO, ILL. Phone Har. 6373

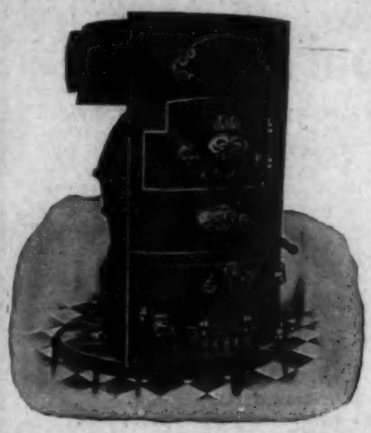
A Passport to Comfort

Is what everyone receives who buys a XXth Century Heater. Dealers are reaping the benefit of this fact. Write for illustrated catalogue which tells all about it. Mailed promptly on request.

XXth Century Heating & Ventilating Co.

Manufacturers of the Celebrated XXth Century Line of Warm Air Furnaces and Steam and Hot Water Boilers.

GENERAL OFFICE AND FACTORY AT AKRON, OHIO.



OUR NEW

De Haven All Cast Furnace

STRICTLY MODERN AND UP-TO-DATE IN EVERY RESPECT

All the latest features in modern furnace construction are embodied in the make-up of this furnace. Features:

Extra Heavy; Gas Tight; Burns all Grades of Hard Coal, Soft Coal and Wood; Simple and Economical to Operate; Top Return Flue Radiator; Large Radiating Surface; Rolling Bar Grate.

WRITE TODAY FOR CATALOG AND PRICES

Youngstown Furnace & Supply Company

Manufacturers of the Celebrated **LION-APEX** and **BESSEMER** Series of Furnaces

Niles, Ohio

Chicago Branch
218 East Lake Street

ROOD & McINTYRE
Kansas City, Mo., Southwestern Distributers

NO OTHER FURNACE LIKE IT

We offer an original and entirely new idea for generating warm air in the

MAJESTIC WARM AIR HEATER

Its design and merits differ so widely from those of other makes that it is a splendid specialty and each job installed helps sell another.

ITS CONSTRUCTION

Made of the very best quality of No. 1 grey cast iron—no material will radiate a large volume of warm air as readily as cast iron. Burns hard coal, soft coal, coke or wood. Wood can be burned horizontally in combustion chamber on sectional flat wood grates which lay on top of fire pot; the furnace is low enough to be placed in a basement five and one-half feet deep. Cheap furnaces and cheap furnace work never gain a good reputation in warm air heating. **The Majestic agency is sure to win you a good reputation. Write for our Catalog today.**

Majestic Furnace & Foundry Co., HUNTINGTON, INDIANA

"GILT-EDGE" FURNACE SALES MEAN "GILT-EDGE" SATISFACTION

For The Dealer and His Customers

"GILT-EDGE" Insures the Greatest Economy, Durability and Power.
Our Publicity Department will co-operate with you.
Write for selling plans, catalogues, etc.

R. J. SCHWAB & SONS COMPANY
Manufacturers
Park, Clinton and Reed Sts., MILWAUKEE, WIS.

A FURNACE—FREE OF COST

¶ Your customer will be interested if you promise to return to him each year a part of the purchase price of his furnace until all has been returned. In this way he will secure his furnace free of cost.

¶ This is exactly what you can do by offering him

Green's Colonial Furnace

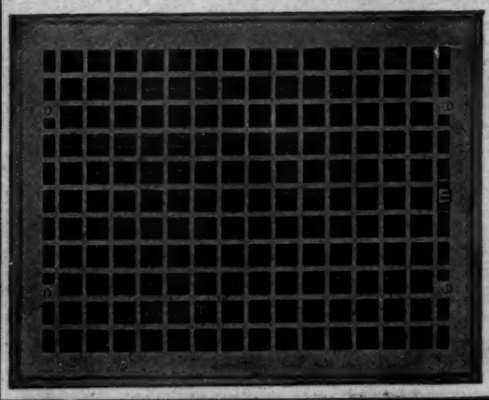
¶ With the average furnace the smoke passes up the chimney and is lost. The bowl in Green's Colonial Furnace is provided with slots, through which the air enters the fire, the oxygen in the air creates combustion, the smoke is burned, and your customer will need just that much less fuel. One-third of soft coal is smoke. If this one-third is burned, it will require just that much less fuel. This one-third will be money in your customer's pocket each year and in a few years the furnace will have cost him nothing.

¶ Write for catalogue giving full description of this and other furnaces. Do this to-day.

Green Foundry & Furnace Works
DES MOINES, IOWA
Lincoln Stove Repair Co., State Managers, Lincoln, Neb.
Rowe Construction & Heating Co., State Managers, Watertown, S. D.

ALL STEEL REGISTERS

AS SPECIFIED BY U. S. GOVERNMENT



¶ This is the register that fulfills all requirements of the United States Government, as called for on specifications for all wrought steel goods.

We carry approximately 500,000 registers always in stock.

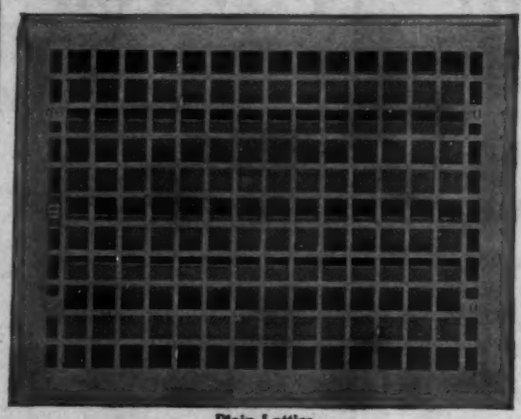
Tuttle & Bailey Mfg. Co.
NEW YORK, CHICAGO, BOSTON

KEEP US IN MIND!

Furnaces—Ranges—Boilers

RICHARDSON & BOYNTON
COMPANY

Chicago——New York——Boston



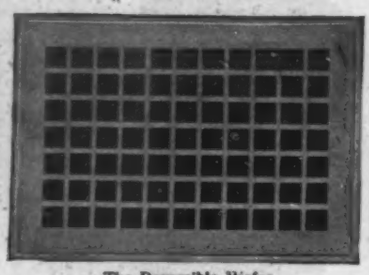
Plain Lattice

WROUGHT STEEL REGISTERS

The kind specified by the U. S. Government

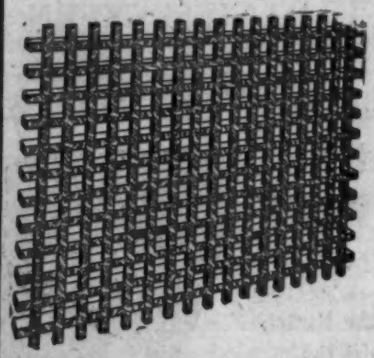
Roller Bearing movement—never sticks or catches. Valves are Self-locking

The kind used for shallow flues. Can be placed EITHERWAY—upright or across.



The Reversible Wafer

Ferrosteel Company, Cleveland, Ohio



THE PADGETT
Hard Wood Cold Air Faces and Ventilators

have become so popular that others are trying to imitate them. The genuine Padgett goods are made by a process discovered and known only by the owner and inventor. No imitation will give the service, have the durability and beauty of the Padgett ventilators. Imitations are cheaper first cost, but much dearer in the end. Who wants a cheaply constructed ventilator in his home that will ruin the appearance of the room in a short time? Ask for the Padgett Hard Wood Cold Air Face, manufactured by

THE WOODEN VENTILATOR COMPANY

No goods genuine without the Company's stamp, watch for it.

BRANCH WAREHOUSES:

155 East Lake St., Chicago, Ill.
827-837 N. St., Lincoln, Neb.
1201-3-5 9th St., Kansas City, Mo.
420 Deaderick St., Nashville, Tenn

MAIN OFFICE AND FACTORY, EAST PALESTINE, OHIO

You Don't Have To Worry

about the satisfactory working of your heating jobs if you have installed a MUELLER furnace.

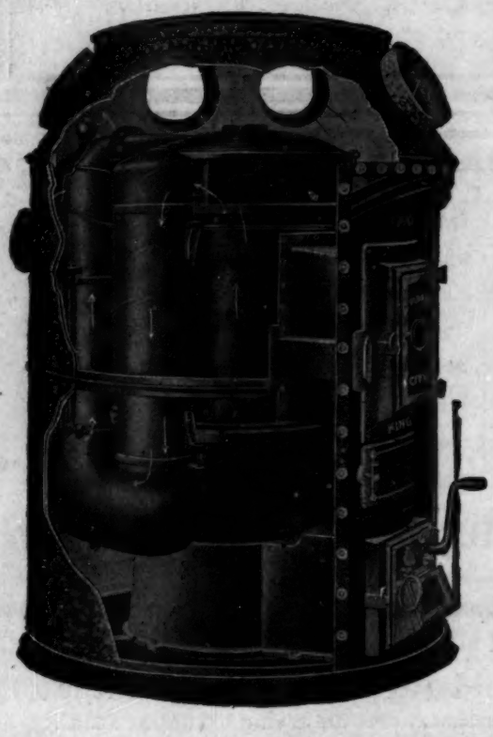
They are very economical in fuel consumption—and they last a life time.

MUELLER furnaces are not competition goods—they are in a class of their own—above all others.

Our catalog will tell you all about MUELLER furnaces. We'll send it to you—what is your address?

L. J. MUELLER FURNACE COMPANY

Established 1857 — 191 Reed St., MILWAUKEE, WIS.



One of the many styles in which

Floral City Furnaces

are made

Write for our new Catalog just out. We can interest you.

Monroe Foundry & Furnace Co.
Monroe, Mich.

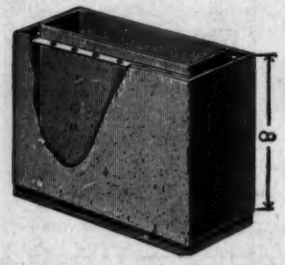
It Will Pay You

to illustrate your advertisements in your local papers. A sheet of comic advertising cuts sent on application

These cuts are furnished with catchlines showing their application to the hardware, stove and tinners' trades.

Address

DANIEL STERN
355 Dearborn St., - CHICAGO



The MICHIGAN SAFETY FURNACE PIPE COMPANY

Corner Brooklyn and Abbott Streets,
DETROIT, MICHIGAN.

The STIFFEST and BEST Machine-made Pipe on the Market.

The only Sectional Furnace Pipe made in which the inner Walls Form the Cross Walls.

WRITE FOR CATALOG.

No Wings to Pull Out. — No Cleats to Bend.

OUR LARGE FACTORY INSURES PROMPT DELIVERY

DO NOT GET US CONFUSED WITH OTHER MANUFACTURERS

Extra Expense Eliminated

¶ Owing to the bulky condition of cold air pipe when put together and the number of crates required for shipping, the freight rate is exceedingly high and the furnace man practically has been forced to make the pipe himself.

¶ All this extra expense is eliminated by

Meyer's Nested Cold Air Pipe

¶ A large amount of it can be put in one small crate, in which condition the freight rate is very low. This together with the large and ever increasing demand has made the price of MEYER'S NESTED COLD AIR PIPE so low that it can not be made without loss in the ordinary tin shop.

¶ Our nested pipe is put together at the job without any tools or stakes. First the edges are locked by merely putting them together. Next the three notches shown are turned over the seam, which absolutely prevents it from telescoping.

¶ It presents a mechanical and highly finished appearance when put together.

All our lines, such as HANDY Furnace Pipe, Round Pipe, Elbows, Registers, Asbestos, etc., are complete, and any order large or small will receive immediate attention. Write for prices.

F. MEYER & BRO. CO., PEORIA, ILLINOIS

HANDY NESTED STOVE PIPE T JOINT.

Saves 90 per cent of room.
Saves 75 per cent of freight.
Does not damage in shipping.
Is stronger and neater than a hand made riveted T.
Is always ready for use.
Fastens together with two bolts.
Is a perfect fitting joint.

Never the rusty and unsightly T Joint usually offered for sale. Always neat, clean and salable. Packed ten 12-inch joints in a crate 7x8 inches and 14 inches long, weighing 15 lbs. Made in Common, Polished Blue Steel and Planished Iron.

ASK YOUR JOBBER FOR PRICES AND SAMPLES

Kinne Manufacturing Co., Minneapolis, Minn.

CUT THIS OUT

THE AMERICAN ARTISAN AND HARDWARE RECORD

DANIEL STERN, Publisher and Proprietor

355 Dearborn Street, CHICAGO

Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars for one year's subscription, or 50 cents in case we decide to discontinue.

Name.....

Address.....

Town..... State.....

There's Big Profit in Little Things---Especially 5 and 10 Cent Goods

¶ Of course it is profit—and just as much of it as you can get — that you are after. And isn't it true that small profits on many articles pile up faster than the bigger gains on a few?

¶ It's the general total that counts — sales divided among many people are apt to yield better profit than when just a few purchases make up the volume. In one case a limited number of people are patronizing your store — in the other many—and each is a purchasing possibility.

¶ Especially during the sizzling, sultering, simmering summer months are these little sales important.

¶ Why not get after them now—push 5 and 10 cent goods now? Suprising how many things really needed and wanted can, with profit, be sold for these amounts. And these goods are all wonderfully quick sellers. They not only sell quickly and at a profit, but actually stimulate other sales — put life and ginger into the hot months' business.

¶ And your best market for all of this merchandise is our July catalogue — just out. It quotes lowest net prices on more than twelve thousand 5 and 10 cent possibilities. It lists at 45 cents each dozen many regular 10 cent items. At ninety-five cents some 15, 20 and 25 cent sellers. And **good sellers** even at these big-profit prices.

¶ And by all means see that you get our July catalogue. It's free and will be gladly sent to any merchant. Ask for No. N726.

Butler Brothers

Exclusive Wholesalers of General Merchandise

New York Chicago St. Louis Minneapolis

Sample Houses—Baltimore, Omaha, Dallas, San Francisco, Seattle

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES AND ITS POSSESSIONS, (Invariably in advance): ONE YEAR, POSTAGE PAID, $2.00.
IN FOREIGN COUNTRIES INCLUDING CANADA, ONE YEAR, POSTAGE PAID, $4.00
Address all Letters, Communications, and Remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,
355 DEARBORN STREET, CHICAGO, ILL.

Entered as Second-Class Matter June 25, 1885, at the Post Office at Chicago, Illinois, under Act of March 3rd, 1879.

CHICAGO, JULY 3, 1909.

OFFICIAL sanction was given to the "more daylight" plan by the City Council of Cincinnati in the passage of an ordinance which provides for local operation of the scheme which may be taken up by the Federal Government and eventually come into common vogue in this country. The plan urged by heads of commercial and business clubs contemplates moving the clock hands back one hour during the period from May 1 till October 1, somewhat after the proposed change in England and Canada. So far as known, Cincinnati is the first city in this country to change the working hours during the summer months. The idea, it is stated, has been introduced in England, France, Germany, Australia, Denmark and Belgium. The ordinance was introduced into the council accompanied by a petition signed by 90,000 names and was passed unanimously.

Railroad Man Gives Key to Success.

"I BELIEVE that high officials in the railroad world should come into closer touch with their patrons. A railroad, like any other large business, should aim to give the people what they want. If this policy were generally carried out it would do away with about half of the legislation against railroads."

These statements with others of a similar nature were recently made by the vice-president of one of our big railroad systems, who twenty-two years ago was an office boy in a railroad office and who is now but 42 years of age. The railroad man outlined his policy regarding the attitude of railroad officials toward the public, and incidentally described the mental attitude which he believed most helpful in attaining success in business.

"The purpose of a railroad," he said, "is to sell transportation to the people. It is not intended to make a position for you or for me or for anybody else. It is a commercial enterprise with something to sell, and it should act accordingly. It has been my constant endeavor to keep in touch with the people—the patrons of the railroads. If more officials would adopt the plan I think we should have better railroad laws and fewer of them.

"I make it a rule never to refuse to see anybody. The man who has a complaint to make can always come into my office and tell me about it. I will pass a whole day with him if necessary in order to convince him he has no real grievance or to do him justice.

"It is the railroad officials who sit behind closed doors and refuse to see any one who have done much toward getting the roads into bad repute. The man whose card is sent back to him with the words 'Nothing doing' says to himself: 'Crookedness somewhere, all right, or why wouldn't they talk to me?' If this man were made to understand that the railroads are really trying to do the right thing all would be different. I have always instructed all employes subject to my direction never to refuse to hear complaints and to treat complainants kindly. The result is that I have had little trouble.

"Not long ago complaints came from a town down in Illinois. They wanted a new station. I went down personally to attend a meeting of business men. I took a great deal of trouble to explain to them our position. I told them that the stockholders of the railroad did not care personally whether the station at this particular town was in a $40,000 building or in a box car, but that the management of the road wanted to give the people what the people wanted. If they wanted the station built upside down, I said, we would be glad to build it that way."

If THE AMERICAN ARTISAN were to name any one thing as being most instrumental in helping young men to success, it would be perseverance in the attitude that the position you hold, however small, is as important as the highest. Never despise your work. Always put into it all the energy there is in you. The man who follows these rules can never fall far behind.

Advertising.

PERHAPS you once tried a bit of advertising, and it did not pay. Does this prove anything? You might as well condemn automobiles because you once went out in one, and it broke down. There are good automobiles, and there is good advertising.

Good advertising means advertising that is planned for a real business by advertising men who know their business—planned in such a way that the other resources of the advertiser (salesmanship, dealers, follow-up, etc.), co-operate to form a whole, called "merchandising."

Advertising used to be a sort of patent medicine—you bought so much space and put something in it. Nowadays, it is different; it is a matter of individual prescription.

Goods are sold not by their merits but by the purchaser's appreciation of these merits. The mental attitude of the consumer modifies very much his impression of the goods, even when he uses them.

In a big business it is, of course, impossible for the proprietor to get into personal contact with his public, but he can impart the personal element to his goods by the right kind of advertising.

Suppose every man had to raise his own foodstuffs,

make his own clothes and build his own house. Comfortable living would then be impossible.

We thrive by specialization and the exchange of products. Advertising is an agent of advanced civilization. It informs the consumer where and how to get the things which he needs but does not make for himself. People who ally themselves with the force of progress prosper. It costs money to adopt new machinery or new methods, but, in the long run, it pays.

Wide Distribution of Our Manufactures.

THE popularity of American manufactures abroad is illustrated by the detailed export tables of the Bureau of Statistics, of the Department of Commerce and Labor, just published as a part of its volume—Commerce and Navigation of the United States. These tables show the principal articles exported and in detail the various countries to which they are sent.

In the case of mowers and reapers, for example, it is interesting to note that no less than 75 countries and colonies are named as the destinations of this class of our manufactures exported. Russia in Europe is the largest purchaser of mowers and reapers, the value thereof exported direct to that country in 1908 being over 3 million dollars, to France 2¾ millions, to Germany 1½ millions, to Argentina over 1 million, to the United Kingdom ¾ million, and to Australia and New Zealand approximately ¾ million. Even to Asiatic Russia the value is nearly ½ million dollars, and to Chile more than 100 thousand dollars; while to British South Africa the total is over 100 thousand dollars, to French Africa 128 thousand, to India about 7 thousand, to Turkey in Asia nearly 10 thousand, to the Philippine Islands over 3 thousand, and to the Dutch East Indies a little more than 1 thousand dollars.

American plows and cultivators are turning up the soil in more than 70 countries and colonies of the world—in Japan in 1908, 22 thousand dollars' worth, in Asiatic Turkey 14 thousand dollars, in New Zealand 50 thousand dollars, in British South Africa 222 thousand dollars, in Portuguese Africa 31 thousand dollars, in Cuba 85 thousand dollars' worth; while Argentina took in 1908, 780 thousand dollars' worth, Canada 474 thousand dollars, Russia in Europe 259 thousand, and Asiatic Russia 7½ thousand dollars' worth.

American billiard balls, which one would scarcely expect to see as an article of export, went to Panama—4 thousand dollars' worth—in 1908; to France over 3 thousand dollars' worth, to the United Kingdom about 16 hundred dollars' worth, to Mexico nearly 2 thousand dollars' worth, to Cuba nearly a like value, to Colombia a similar value; while other countries named in the list of those to which this article of American manufacture was sent are Costa Rica, Nicaragua, Salvador, Danish West Indies, Dutch West Indies, Hayti, Venezuela, Ecuador, New Zealand and Dutch East Indies.

American stove polish contributed in 1908 to the happiness of housewives in the United Kingdom to the extent of about 10 thousand dollars' worth, Canada 14 thousand dollars, Australia over 4 thousand dollars, New Zealand 25 hundred dollars; while other countries named in the list of recipients of this product of the American factory are Hayti, the French islands of Miquelon, Langley, etc., British Honduras, the Azores, the Madeira Islands, British Guiana, Japan and the British East Indies.

American candles light homes in more than 40 countries of the world, including in 1908, Cuba 188 thousand dollars' worth, Canada 35 thousand dollars' worth, and Mexico 35 thousand dollars' worth; while other countries named as the destinations of American manufactures of this article are Korea, Japan, China, Hongkong, Asiatic Russia, French Oceania, British South Africa, Bermuda, British and Dutch Guiana and Panama.

American automobiles were sent in 1908 (nearly 5 million dollars' worth) to 50 countries and colonies, including, first, the United Kingdom 1½ million dollars' worth, Canada ¾ million, France over ½ million, Mexico ⅓ million, Italy ¼ million, Cuba 167 thousand dollars' worth, and the Dutch East Indies 80 thousand dollars; while other countries to which they were sent included Turkey in Europe, Egypt, the Canary Islands, British South Africa, Siam, Hongkong, Japan, Straits Settlements, British India, Australia and New Zealand, and the Philippine Islands.

American bicycles went to more than 60 countries and colonies of the world in 1908, including practically all of the European countries; the principal countries of North and South America; China, India, Straits Settlements, Dutch East Indies, Hongkong, Japan, Korea, Asiatic Russia, and Siam, in Asia; Australia, New Zealand, French Oceania, German Oceania, and the Philippine Islands, in Oceania; and practically all of the European possessions in Africa.

American watches mark time in Canada, United Kingdom, Germany, practically all of the North and South American countries, China, British India, Straits Settlements, British East Indies, Hongkong, Japan, Korea, Asiatic Russia, and various islands of Oceania; while American clocks of equal value were sent in 1908 to 75 countries of the world, the total value of watches and clocks exported in that year being about 3 million dollars.

Five million dollars' worth of American binder twine went to 70 countries, including 1¾ million dollars' worth to Argentina, 1⅓ millions to Canada, ½ million to United Kingdom, ¼ million dollars' worth to Russia in Europe, 83 thousand dollars' worth to Asiatic Russia, and smaller quantities to various European and American countries; also to Australia, New Zealand, British South Africa, Japan, China, British India, and the Straits Settlements.

Other countries and sections of the world to which American merchandise is sent included Greenland and Iceland, Gibraltar, Tripoli, Falkland Islands, Canary Islands, Kiaochau (the German port in China), Port Arthur and Talienwan (the Japanese ports in China), Morocco, the Kongo country in Africa, Servia and Roumania in southern Europe, and Tasmania, just off the coast of Australia; while numerous other islands to which manufactures are sent are included by the Bureau of Statistics in its general classifications of German Oceania, French Oceania, British Oceania, etc.

The above statement, showing the wide distribution of American manufactures, necessarily mentions in this detail but a very small proportion of the American manufactures exported.

RANDOM NOTES AND SKETCHES.

BY SIDNEY ARNOLD.

The life of Henry H. Rogers, the Standard Oil magnate who died recently, is largely a repetition of the lives of most American financiers in several significant respects. His first occupation was selling newspapers. From that he rose by successive stages. There were no sudden and spectacular leaps. His progress was gradual. When we consider that his case is typical—that the men who are foremost to-day in finance are the barefoot boys of yesterday—we see how far we are from the permanent class divisions that certain people profess to discover in this country. Mr. Rogers' death—the death of any leader in the financial world—leaves a place for the one fit to take it, no matter whence he comes. Just as Mr. Rogers rose from an humble station, other American boys will rise. The way is still open; the opportunities will not be lacking as long as a growing nation has growing wants. Among the examples of success presented for the encouragement of American youth the financiers perhaps fill too large a space. Successful as H. H. Rogers was, and encouraging as is the story of his success, it is necessary to remember that his was only one kind of success. But whatever the particular goal of success to which natural ability leads, we find, in America, at least, an astonishing sameness in the life story. In most instances it is the story of a poor boy rising from obscurity to eminence through natural and necessary gradations. When we consider the careers of the Americans who have been successes in finance, law, industry, politics, letters, etc., we seem to be regarding a series of varied ornaments all broidered on the same simple ground—the ground of cheerful, intelligent and earnest effort from small beginnings to large accomplishment. As a potent illustration of this common element in successful careers in America the life of H. H. Rogers is particularly interesting. His was indeed a large career, though in only one of the many ways that lie open to the boys of every generation in this great republic of ours.

* * *

"The boy comes out of school and he can't write an intelligent letter. His work is ungrammatical. It is illegibly written. Half of the words are spelled wrongly. Now, gentlemen, schools that can't teach a boy to write a letter, spell it properly, and phrase it grammatically are failures." A leading business man of Chicago, who stands high among his fellows and, presumably, expresses a conviction that is general and not individual, is quoted as using such words of condemnation in a "quiet, confidential way." And then, praising a movement that is winning financial support of more than half a million dollars, he continued: "I am glad that you are collecting money for educational purposes. We need you badly." It is the same old story. The charge often made finds added force when thus brought to attention again. Millions of dollars are being spent for instruction in the schools. But when the products of these schools seek for means of livelihood they find themselves up against it, so to speak, and utterly unprepared even in the essentials ordinarily indicated by the words, "the three R's." If such a charge stands against the high school graduate, what is true of the thousands who get no farther than the grammar schools? This good old English language, so rich in its possibilities, is shamefully neglected. Those who inspect the work when the high school graduate enters college note the distressing conditions as quickly as the keen man of business does.

The boys and girls are unable to write English correctly. They know little of grammar. They are deficient in penmanship. They cannot spell. These conditions are observed all over the country. And when a man of affairs who has traveled the path to success calls attention to them in searching words, the need of investigation of the courses of study in the schools is all the more apparent. There are many reasons for thinking that they do not provide some of the essential, practical training that the pupils sorely need. Some years ago I had the pleasure of occupying a desk in a large publishing house adjoining one occupied by a graduate of one of our leading universities, who had more handles to his name than a Russian high admiral. The work upon which we were engaged was of a technical character, in fact so technical that I often used to wonder what on earth business I had on the job, and my wonderment was intensified when I found myself seated beside a savant who could reel off botany, zoology, entomology, ichthyology, and anthropology by the yard. Well, one day one of my collaborators asked me if I knew which was the heavier, a pound of gold or a pound of feathers. I had heard the question asked many times before, as most of us have, and in answer to it I said, of course, that a pound of feathers weighed more than a pound of gold, which, of course, it does, seeing that troy weight instead of avoirdupois is the weight by which gold, silver, jewelry and the like are weighed. This was news to the "professeur," who insisted that "a pound was a pound," disclaiming any knowledge of the fact that in a pound troy there are 5,760 grains while in a pound avoirdupois there are 7,000 troy grains. Do you wonder why the educational system of our schools and colleges is the subject of so much adverse criticism?

* * *

A South Missouri man recently was tried on a charge of assault. The state brought into court as the weapons used a rail, an ax, a pair of tongs, a saw and a rifle. The defendant's counsel exhibited the other man's weapons, a scythe blade, a pitchfork, a pistol and a hoe. The jury's verdict is said to have been: "Resolved, That we, the jury, would have given one dollar to have seen the fight." And, believe me, I would have gladly come up with a dollar myself to witness the performance. Shakespeare (I think it was the Bard of Avon)said, *"Thrice* is he armed who hath his quarrel just." But in this case the bellicose defendant and plaintiff went two and one better, respectively.

News Siftings

The Buehler Stove Foundry at Wapakoneta, Ohio, was wrecked by a cloudburst on June 25.

The capital stock of the Frazier Stove Company, Anderson, Ind., has been increased from $50,000 to $100,000.

Wm. T. Lewis of Norfolk, Va., is said to be contemplating the establishing of a plant at Charlotte, N. C., to manufacture a patented steel cooking range.

The Early Sun Stove & Range Co. of Newark, O., has been incorporated with a capital stock of $20,000, by C. F. Dean, C. E. Ludy, G. A. Wise, A. J. Mathias and C. W. McAdams.

The Fraternal Stove Co. of Grover Hill, Ohio, has been incorporated with a capital stock of $30,000. The incorporators are: B. J. Gilbert, J. W. Owens, G. S. Smith, A. M. Foot and N. B. Mericle.

The J. W. Pohlmann Foundry Co. of Buffalo, N. Y., has been incorporated with a capital stock of $10,000, to manufacture stoves. The incorporators are: John W. Pohlmann and Fredericka Pohlmann, 213 French street, and Wm. F. Pohlmann, 193 Loudon street, all of Buffalo, N. Y.

Wm. G. Willard, 119 Willard Bldg., 320 Chestnut street, St. Louis, Mo., states that there is a big demand for "Willard" Steel Ranges, for the reason that they give perfect satisfaction and don't cost too much. The "Willard" range is said to be a snap for wide-awake range dealers. When writing for prices, kindly mention THE AMERICAN ARTISAN.

The Nickel Plate Stove Polish Co., Chicago, report that their "Peerless" Enamel is becoming more and more popular with the trade and that they are selling more of it than ever. The Gloss Black is for stove pipes and all iron work, while the Aluminum is adapted for radiators, pipes, etc. They request the trade to write for samples. When doing so, kindly mention THE AMERICAN ARTISAN.

The Kinne Mfg. Company, Minneapolis, Minn., state that their Handy Nested Stove Pipe T Joint saves 90 per cent of room and 75 per cent of freight, that it does not damage in shipping and that it is stronger and neater than a hand-made riveted T. It is always ready for use, fastens together with two bolts, and is said to be a perfect fitting joint. It is packed ten 12-inch joints in a crate 7x8 inches and 14 inches long, weighing 15 pounds. It is made in common, polished blue steel and Planished iron. When writing the Kinne Mfg. Company, kindly mention THE AMERICAN ARTISAN.

The Landay Steel Range Co., St. Louis, Mo., manufacturers of "Matchless" steel ranges, have purchased a building at 1406-1412 North 16th Street, between O'Fallon Street and Cass Avenue, St. Louis, in which they will manufacture their new line of steel ranges, heaters, base-burners and laundry stoves. The building which is within a stone's throw of all the freight depots in the city, contains about 50,000 square feet of floor space. It is of modern construction and is said to be ideal for manufacturing purposes. The company advise that the policy heretofore pursued by them with their customers, namely, to "make big sales and small profits," will be continued in the future. They state that all designs in their steel ranges, heaters, etc., will be modern and strictly up-to-date.

The March-Brownback Stove Co., Pottstown, Pa., are distributing a folder showing several styles and sizes of their "Art Reliance" ranges. They are declared to be flat house ranges of the highest grade and they are of handsome design. The company's new semi-plain sheet flue, flat house range is made with right or left hand oven, and with or without water back. It is furnished with Duplex grate and door base. It has a sectional top, a nested cover, and is fitted with direct draft damper.

THE "PENN ESTHER" RANGE.

The Mt. Penn Stove Works, Reading, Pa., and 111-113 North Second street, Philadelphia, have brought out the "Penn Esther" range with right or left hand oven. The illustration, herewith, shows the former style. This range has a steel high closet, and is fitted with a patented "Victor" non-lifting brick and "Victor" non-disturbing water front. It can be

The "Penn Esther" Range With Right Hand Oven.

furnished with any style of pipe shelf, tea shelf or warming closets. The reservoirs are in 18 and 20-inch oven sizes, and for these sizes there is a wood-burning grate and cast-iron fire-box linings. If so desired this range can be furnished with a thermometer in the oven door. The nickel trimmings on the "Penn Esther" range are bolted, and altogether the range, while plain, is very attractive. It is provided with handsome nickel knobs, malleable shaker and lifter, and ash pan. When writing for catalogue, kindly mention THE AMERICAN ARTISAN.

ORDER BOOK OF THE U. S. STOVE REPAIR CO.

The U. S. Stove Repair Co., 13-15 South Third street, Minneapolis, Minn., have gotten up an order book which they are distributing to the trade for convenience in ordering stove, range, furnace repairs, etc., of them. A special form has been drawn up by them which will obviate any possibility of mistakes being made in ordering. When all the blanks have been used up, a new book can be procured. The company's

line includes urns, mica, knobs, stove rods and bolts, stove lifters and scrapers, hinge pins, stove polish, asbestos cement and paper, water fronts, and special and common fire brick for ranges and heaters. The company state that they can furnish repairs for practically all makes of stoves on the market. When writing the U. S. Stove Repair Co., kindly mention THE AMERICAN ARTISAN.

THE "ACME" OVEN THERMOMETER.

The Evans Stamping and Plating Co., Taunton, Mass., report that their "Acme" Oven Thermometer, here illustrated, is having a very successful run and that it is coming more and more into general popularity. The manufacturers state that their thermometers are in use by a large number of range manufacturers

"Acme" Oven Thermometer.

and that they have proven to be all that their name signifies, "Acme," the "height of perfection." The "Acme" is declared to be accurate in registration, is simple in construction and is easy to ship. The company supply these thermometers with the trade name of the purchaser on the dial at no extra expense where a reasonable number are bought during the year. When writing, kindly mention THE AMERICAN ARTISAN.

RANGES OF THE BOYNTON FURNACE CO.

The Boynton Furnace Co., 147-149 Lake Street, Chicago, have now ready for distribution Catalogue No. 61, illustrating and describing Boynton's "Lakewood," "Niagara" and "Newport" Ranges. The company state that their lines of cooking apparatus have successfully borne the test of time through a great many years with a constantly increasing annual output and that today they are more popular than ever. Their plain classical design, smooth castings and highly finished nickeled parts will quickly appeal to the most critical purchaser, say the manufacturers.

Boynton's Double Oven "Lakewood" Range is of all cast iron construction. It is fitted with a fire-pot of sufficient size to heat with economy both ovens and large water back. It has a patent triangular revolving grate fitted with a novel and ingenious attachment to prevent the grate from burning out. It has a sifting grate and ash pan with wide flanges to prevent overflow of ashes. The water back in the rear end of the fire-box extends toward the front, and the boiler may be connected on either the right or left hand side of the range. The method of connecting the boiler with the water back from the front of the range does away with the necessity of drilling holes through the jambs when setting in brick set form, and when set in portable form, it is not necessary to take down any smoke pipe nor to remove the range from the chimney breast. The direct draft damper is operated from outside of the range, the positive operation of the smoke pipe dampers regulating the heat in either oven with the same accuracy.

The Boynton Furnace Co. state that their "Niagara" Single Oven Range is one of the most attractive ranges on the market. It is said to be up-to-date in every particular, having an equal capacity for baking, broiling and hot water. It has a patent ventilating damper in the smoke pipe to remove odors when cooking. The "Niagara" Range is of handsome design and is strong and durable.

The company's "Newport" Single Oven Ranges are fitted with fire-boxes on the right or left hand side of the oven, as may be desired. The water back is large and effective, and the drop broiling door is large and convenient for broiling and feeding purposes. The grate may be removed without disturbing the fire brick or water back. When writing the Boynton Furnace Co. for catalogue, kindly mention THE AMERICAN ARTISAN.

CORES FOR ALUMINUM CASTINGS.

Cores for aluminum castings should be made with the intention of using them for aluminum if the best results are to be obtained, and not for general work. A core which will give good results in making iron castings may not answer at all in casting aluminum, says the *Brass World*. As aluminum does not "burn" the sand at all, it is useless, and also objectionable to blacken the surface of a core to be used in making an aluminum casting. In the first place it does no good at all, and the labor spent in doing it is wasted. In the second place, the blacking stops up the pores of the core on the surface (and this is where it should be the most open) and prevents the escape of the gases when the aluminum strikes it. The result is a "blow." By not blacking a core the sand is left as open as possible. Unless required for the sake of appearance, too fine sand should not be used in making cores for this work. Coarse sand always gives a more open core than that which is fine. The binder is important, and molasses water seems to be a favorite with aluminum founders, as it serves to hold the core together, and makes but little gas when the aluminum strikes it. Glue is also an excellent material. Whatever binder is used, however, must be such as to leave the core soft. One that can be roughly handled will not do, and castings that are made from it will usually crack. A core that requires delicate handling in order to prevent breakage can always be relied upon, and in practically all cases will produce good aluminum castings.

There are two kinds of people in every community: Those who buy by price and those who buy by quality. The former want to pay about so much for an article and secure the best they can get for the money. The latter want a thoroughly good article and are willing to pay any price within reason for it.

The Hardware Record.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 36 to 41 inclusive.

The Geneva Cutlery Co., Geneva, N. Y., contemplates the construction of a two-story addition to its plant.

The Beatrice Lawn Mower Mfg. Co. of Beatrice, Neb., has been chartered to engage in the manufacture of lawn mowers.

The Vincennes Washing Machine Co., Vincennes, Ind., has been organized to manufacture washing machines, wringers, etc.

The Ajax Wrench Co. of Toledo, Ohio, has been incorporated with a capital stock of $10,000, by William Harrop, Frank Gorman, M. S. Smith, T. E. Lynn and R. B. Wilson.

The Cleveland Roofing Nail Co. of Cleveland, Ohio, has been incorporated with a capital stock of $10,000, by L. L. Norman, G. B. Riley, A. M. McGee, J. R. McQuigg, H. H. Kuckle and A. H. Mills.

The Harrington & King Perforating Co., 212 North Union St., Chicago, are prepared to furnish to the trade perforated metals of every description and for all purposes. They invite correspondence.

The De Loach Hardware Co., of Demopolis, Ala., has engaged in the wholesale and retail hardware business. The officers of the company were formerly connected with the De Loach-McMillen Hardware Co. of Demopolis.

George J. Snider, a prominent hardware dealer of Charleston, Ill., died on June 20. He had made Charleston his home nearly all his life. Mr. Snider was said to be the heaviest man in Coles County, Ill., weighing close to 400 pounds.

The Myers Wringer Co., Mohawk, N. Y., has been organized with a capital stock of $10,000 to manufacture clothes wringers, mop wringers, hardware, etc. The incorporators are: Seward Hakes and George G. Hakes of Ilion, N. Y., and G. L. Prescott of Rome, N. Y.

The annual convention of the Retail Hardware Association of South Carolina will be held at the Isle of Palms on August 10, 11 and 12. It was previously intended to hold the meeting on July 5, 6 and 7. Paul W. McLure, Greenwood, S. C., is secretary of the association.

John Sorenson, a former prominent and prosperous hardware merchant of Green Bay, Wis., who was recently waylaid on a lonely road and clubbed and beaten, died on June 28, from the effects of his injuries. Robbery is said to have been the motive of the attack.

Sam T. White, President of the White Lily Mfg. Company, Davenport, Iowa, and A. F. Victor, Manager of the company's Eastern Branch at Toledo, Ohio, were callers at the offices of THE AMERICAN ARTISAN during the week. They state that the company is enjoying a very successful season's business with their celebrated line of washing machines and gasolene engines.

The Zeitinger Company, New York city, have been incorporated with a capital stock of $25,000 to manufacture hardware, tools, etc. The incorporators are Bernard I. Kamen and M. G. Bender, 34 Nassau street, and Charles Zeitinger, 161 Chrystie street, all of New York.

The Threadless Lock Nut & Bolt Co. of the United States, has been organized with a capital stock of $500,000 to manufacture bolts, spikes, nuts, etc. The incorporators are: George H. Roberts, 20 Cambridge Place; Robert Avery, 98 Second Place; Walter Avery, 98 Second Place, and others, all of Brooklyn, N. Y.

The Peninsular Milled Screw Co., Detroit, Mich., whose plant was recently destroyed by fire, is now occupying a building in which operations on a small scale are being carried on. New machinery has been ordered, and the company expect that within a few weeks they will be operating on as extensive a scale as before the fire.

The D. & F. Kusel Company, hardware dealers, Watertown, Wis., celebrated on June 26 the 60th anniversary of the founding of the present business by the late Daniel Kusel. Daniel H. Kusel and Frederick Kusel, sons of the founder, are president and vice-president, respectively, of the company, the former being also treasurer.

The Pittsburgh Steel Co., Pittsburgh, Pa., state that their Pittsburgh "Perfect" fence is the strongest and most satisfactory fence on the market. It has no wraps or clamps to hold moisture and cannot rust; besides, it is electrically welded. They guarantee it to curb the strongest beasts. It can be adjusted to uneven ground. The company request the trade to write for descriptive matter.

At the recent convention of the Arkansas Retail Hardware Association held at Fort Smith, Ark., the following officers were elected: President, J. P. Simpson, Malvern; first vice-president, J. B. Hurley, Warren; second vice-president, George T. Lake; secretary, W. L. Harlan, Little Rock. The new members of the executive committee are: R. L. Roys, Russellville; W. G. Jackson, Dardanelle; J. Geter, Jonesboro. The 1910 convention will be held at Little Rock.

HIGH GRADE STANDARD METALWARE.

The Buffalo Mfg. Co., Buffalo, N. Y., state that their line of High Grade Standard Metalware has achieved a marked degree of popularity since its introduction to the trade and that every item that they manufacture is a ready seller. Their line includes the following: Chafing dishes, table kettles and stands, coffee extractors, water filters, nursery chests, crumb trays and scrapers, tea and bar urns, bathroom fixtures, wine coolers, water coolers, baking dishes, coal vases and hods, candlesticks, cuspidors, match safes, 5 o'clock teas, jardinieres, etc. The company's illustrated catalogue describes in detail all these articles. It may be had for the asking. When writing for it, kindly mention THE AMERICAN ARTISAN.

TWO ATTRACTIVE WINDOW DISPLAYS.

The judges of THE AMERICAN ARTISAN'S 1909 Hardware Window Display Competition spoke in very favorable terms of the exhibit submitted by C. E. Sloan, with the Evans Hardware Co., Statesville, N. C. Mr. Sloan's description of the display is as follows:

"The window shown to the right was made up chiefly of sporting goods. The floor of this window was covered with leaves, and 'partridges' cut out of cardboard were placed here and there on the ground. An old snag with squirrels mounted on same can be seen. The arch was made of 6-inch stove pipe and stove pipe elbows. This was covered with crepe paper. The figure in the window is seated upon a stump and is represented as examining his gun. Pyramids made of shells were placed on either side of the figure, while leggings, hunting coats and pants, gun cases, etc., were hung over the arch.

"The window to the left shows an 'automobile' made of different articles carried in a hardware store. The bottom or bed of the auto was made of a door 2x6 feet resting upon the axle. The wheels were 50-pound grindstones, with half-pint tin cups for hub caps. The sides were formed of cross-cut saws. Two coal vases with sieve wire placed in front of them represented the generator and muffler or cooler. Two dash lanterns placed on either side and in front of the vases served the purpose of lamps. A grindstone crank fastened to a wire sieve represented the crank of the machine, and two joints of 5-inch stove pipe were used for the cylinders. A level placed on either side of the machine served the purpose of a step. Four hand saws bent over the grindstones formed the fenders. A plow lever was used for the propeller and a fire poker with a cake pan placed on top of same comprised the steering wheel. A tinner's brazing torch placed under the machine and lighted made a noise very similar to that made by automobiles. The chauffeur is represented by a wax figure."

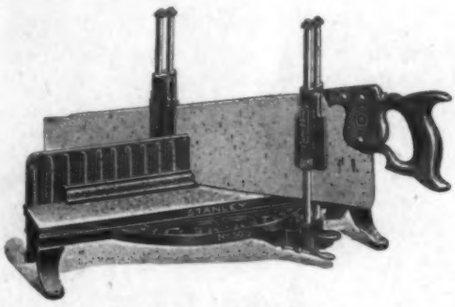
Honorably Mentioned by the Judges in THE AMERICAN ARTISAN'S 1909 Hardware Window Display Competition—Submitted by C. E. Sloan, with the Evans Hardware Co., Statesville, N. C.

COPPER CABLE LIGHTNING RODS AND FIXTURES.

Jos. Barnett & Co., Dept. 33, Riverside, Iowa, state that their copper cable lightning rods are of over 98 per cent pure copper, and that they are scientifically made in every respect. They state that permanent durability characterizes all their fixtures and ornaments, and that absolute protection is positively guaranteed. They state that their rods are in great demand and that there is good profit in handling them. Jos. Barnett & Co. request the trade to write them for their agency proposition and for descriptive literature. When writing, kindly mention THE AMERICAN ARTISAN.

NEW MITER BOX OF THE STANLEY RULE & LEVEL CO.

The Stanley Rule & Level Co., New Britain, Conn., have put on the market a new miter box shown in the accompanying illustration. They declare it to be a strong and accurate tool at a moderate price, and they recommend the box as being thoroughly reliable in every respect. The company have recently issued a catalogue in which this and their other products are illustrated and described. When writing for it, kindly mention THE AMERICAN ARTISAN.



Stanley's New Miter Box.

THE IMPROVED ADJUSTABLE "S" NUT WRENCH.

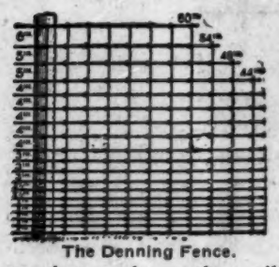
Bemis & Call Hardware & Tool Co., Springfield, Mass., have placed on the market the Improved Adjustable "S" Nut Wrench, shown in the accompanying

Improved Adjustable "S" Nut Wrench.

illustration. This wrench is especially useful in corners and confined places where the ordinary monkey wrench is practically useless. All parts of this wrench are strong and durable, the operating nut is steel and the sliding jaw a steel drop forging. The wrench is well made and the parts are interchangeable. The manufacturers state that their Improved Adjustable "S" Wrenches are the standard among wrenches of this style. They request the trade to write for their complete catalogue. When doing so, kindly mention THE AMERICAN ARTISAN.

FENCE OF THE DENNING WIRE & FENCE CO.

The Denning Wire & Fence Co., Cedar Rapids, Ia., state that Denning Fence is made on scientific and practical principles. It is manufactured in various sizes, weights and meshes, for stock, hogs, poultry and rabbits. The company state that their "Jumbo" poultry, rabbit and field fence is the heaviest and most substantial close fence on the market, and one that will turn anything from a small chicken or rabbit to a horse or bull, and is a fence that most farmers have been looking for. The company request the trade to write for their catalogue and prices on lawn and cemetery fencing, gates, barb-wire, nails, staples, portable corn cribs and grain cribs. When writing, kindly mention THE AMERICAN ARTISAN.



The Denning Fence.

A NEW HARDWARE DELIVERY WAGON.

The Sycamore Wagon Works, 109 Edwards street, Sycamore, Ill., state that they have a hardware delivery wagon that can be depended upon. It is illustrated herewith. The body is 20 inches from the ground and

Hardware Delivery Wagon of the Sycamore Wagon Works.

is full width. The wheels are of regular height and yet will turn short. The wagon is easy to load and unload and is guaranteed to be very durable. The company will be pleased to forward their catalogue on request. When writing, kindly mention THE AMERICAN ARTISAN.

THE JULY CATALOGUE OF BUTLER BROTHERS.

Butler Brothers, Chicago, are now distributing their July Catalogue No. N726. The book quotes lowest net prices on more than 12,000 5 and 10-cent possibilities. Butler Brothers state that the 5 and 10-cent articles listed by them not only sell quickly and at a profit, but actually stimulate other sales and put life into the hot months' business. They assert that catalogue N726 lists at 45 cents a dozen many regular 10-cent items and at 95 cents some 15, 20 and 25-cent sellers. Some very attractive bargains are given in staple lines of hardware, stoves, etc. When writing Butler Brothers for catalogue N726, kindly mention THE AMERICAN ARTISAN.

MEMORY OF CHARLES H. WIER HONORED BY THE OLD GUARD.

It is embodied in the Constitution of the Old Guard Southern Hardware Salesmen that when a member of the organization shall die an assessment shall be made on the members sufficient to enable the Secretary-Treasurer to pay the sum of $100 for a memorial

Monument Erected to the Memory of the Late Charles H. Wier.

or to the family of the deseased member. In accordance with this provision a monument shown in the illustration herewith has been raised to the memory of Chas. H. Wier, of Baltimore, Md., who died during the past year. The deceased, who was a member of the firm of Wier & Wilson, Baltimore, was one of the most beloved members of the association.

RETAIL HARDWARE DOINGS.

NEW FIRMS AND CORPORATIONS.

Custer City, Okla.—The Custer City Hardware Co., has been incorporated with a capital stock of $20,000, by R. B. Leeka, C. O. Leeka and D. J. Courtney.

Boston, Mass.—The Kiley Hardware Co. has been incorporated with a capital stock of $12,000. Edward John Owen, 15 Gayland avenue, is president.

Brooklyn, N. Y.—The Flatbush Hardware Co. has been incorporated with a capital stock of $1,500. The incorporators are: Joseph H. Newman, Rudolph Wallach and Louis Granbard, all of New York.

Dillon, Mont.—The successors of the G. W. Dart Hardware Co. have re-organized the company and have filed new articles of incorporation under the name of the Dart Hardware & Implement Co. with a capital stock of $40,000. The officers are: President, A. W. Connolly; vice-president, George F. Dart; secretary-treasurer and general manager, George W. Dart.

BUSINESS CHANGES.

Scotts Bluff, Neb.—Ebert, Gamble & Co. have purchased the hardware stock of J. H. Hall. They are in quest of catalogues pertaining to their line.

Belleville, Kan.—George W. Collins & Co. have bought the hardware store of R. M. Brigham, Mankato, Kan.

Los Angeles, Cal.—The Success Hardware Co., incorporated with a capital stock of $10,000, succeeds the firm of Voorhees & Son. The incorporators are: John A. Murphy, G. A. Murphy, Ray E. Voorhees, Charles McClure and Charles Ewing.

Homer, Mich.—Frank Darrow and Earl Warner, who have closed out their hardware store at Sherwood, have purchased the hardware business of Doolittle & Hyatt, and will take possession August 1.

Charleston, Ill.—Walter Adkins, Pleasant Grove, and Moss Davis, Hutton, have purchased the hardware store of the late George J. Snider.

Caroline, Wis.—Julius Hoeft has sold his hardware business.

Gallatin, Mo.—Casteel Brothers have sold their hardware store to Joseph A. Mann.

Knoxville, Tenn.—C. L. Carpenter, vice-president of the Moore-Carpenter Hardware Co., will retire from the hardware business on July 1. The name of the firm will remain the same for the present.

Raleigh, N. C.—R. N. Longest and C. E. Hudson have sold their interest in the Crescent Hardware Co. to D. M. Martin of Stokes County.

MISCELLANEOUS.

Burlingame, Kan.—The store of the McGregor Hardware Co. was destroyed by fire.

Fort Scott, Kan.—The tin shop of the late John Brunny has been sold to Fred Firmin, who will conduct it under the name of Firmin & Company.

Mason, Tex.—The hardware store of Harry Bierschwal, which was destroyed by fire, will be rebuilt.

Mount Vernon, Ill.—The hardware store of Koons Brothers suffered a loss by fire.

Hustonville, Ky.—The hardware establishment of Peavyhouse & Lipps, which was destroyed by fire, will be rebuilt at an early date.

Runnells, Ia.—Denny & Miller have suffered a loss by fire.

Chicago, Ill.—Egbert B. Standart hardware merchant, is reported in bankruptcy with liabilities of $4,873.50 and assets of $169.50.

Guthrie Center, Iowa.—Frank C. Webb will erect a four-story brick building as a hardware store. It will cost $20,000.

Okarche, Okla.—Thompson's hardware and implement store at this place has suffered a loss by fire.

Little Rock, Ark.—It is reported that J. F. Kennedy, receiver for the City Hardware Co., has been directed to offer the property of the company for sale to the highest bidder.

Granite City, Ill.—A petition in bankruptcy is reported to have been filed by Harry H. Bischoff of the H. H. Bischoff Hardware Co. Liabilities are said to exceed $27,000 and assets $22,000.

THE DETROIT COMBINATION GAS MACHINE.

The Detroit Heating & Lighting Co., 366 Wight street, Detroit, Mich., state that the Detroit Combination Gas Machine furnishes a perfect light for the country home. The light supplied by this machine is declared to be the best light for residences, schools, churches, factories, etc., especially where city gas or electricity are not obtainable. The company states that this system of lighting is cheaper than any form of light and gives perfect results. It is declared to be perfectly safe, as the fuel is stored outside of the house. The company says that it is endorsed by the National Board of Fire Underwriters. The gas is said to be in all respects equal to city coal gas, and is ready for use at any time without generating, for illuminating or cooking purposes. Over 15,000 Detroit Combination Gas Machines are said to be in successful operation. The Detroit Heating & Lighting Co. request to be written for information, prices, and a 72-page book, entitled, "Lighting for Evening Hours." When writing, kindly mention THE AMERICAN ARTISAN.

OBITUARY.

W. A. Handley.

W. A. Handley, vice-president of the Moore & Handley Hardware Co., Birmingham, Ala., one of the largest of the hardware jobbing houses of the South, died at his home in Roanoke, Ala., on June 22. For the last two years he had not been enjoying the best of health and had not been very active since he recently fell and sustained a broken arm. Than Mr. Handley there was probably not a better known man in the state of Alabama. He had been identified with the Birmingham district for 27 years and was one of the city's leading and wealthiest pioneer merchants and builders. Major Handley was born near Franklin, Ga., in 1834. He was educated in a village school and was a mail carrier for two years. He engaged in mercantile pursuits and very early made that the work of his life. Going to Birmingham in 1882 he formed a partnership with J. D. and B. F. Moore in what is still the Moore & Handley Hardware Co. For the first six years the firm engaged in the retail trade but upon it being incorporated it was changed to a wholesale house. While Mr. Handley was a large stockholder in the business he had not devoted much time to it for some years past. Major Handley was at one time member of Congress from Alabama and also a member of the Alabama Legislature. During the Civil War he was an officer of the Twenty-Fifth Alabama and was wounded at Murfreesboro. The deceased was a man of marked capacity for business and was, besides, a courteous gentleman. He is survived by a widow, one son, Guy H. Handley of Roanoke, Ala., and two brothers.

Train your people well and you'll always be able to lay your hands on a good man when you need him.

THE VALUE OF POLITENESS IN A RETAIL STORE.

BY AN OLD CLERK.

When you and I were very, very young the old folks taught us to say "please, thanks, welks," to shut the door and tread softly in general. The good old souls wanted us to show we were "raised right." When we started to grow up we learned from others of about our own age that it was smart to be impudent and decidedly "sissy" to be polite.

Now it is a mighty fortunate thing for the ones of us who have unlearned this second lesson in deportment as soon as we got into business. I will show you why on a dollars and cents basis. I am not a preacher, so I won't tell you anything about turning the other cheek to the hand of the slapper. Personally, that particular sort of humility never appealed to me; that is not the way my hair is parted.

But, put a pin in this—it pays a man in business to meet all comers politely. They may not be buying at the instant, but if treated right when they stop in to ask the time of day or something equally profitable to you, they at least have no reason not to buy from you later. If you turn them down in a surly way they have a good reason to leave you alone.

A month ago I had a twenty-dollar bill—got it honestly—and wanted to get it changed. I started out in the town where I happened to be at that time, and here's what happened: First, a cigar store, where I got this answer, "Haven't got it"; second, a drug store, "No, sir; no change for that"; third, a saloon—wasn't acquainted there, of course—"No, we ain't runnin' the Mint." And so on down the line until I had called at seven places without getting either change or a polite excuse for not accommodating me.

Next I tried a small drug store. "Good morning, sir," was the smiling greeting of the proprietor. "What can I do for you?" I told him what I wanted. "No," he replied, "I am sorry to say that I haven't it, but I'll get it for you if you don't mind waiting a moment. Have a chair, sir."

He could have taken my money and my watch, too, before I recovered from that! I was not a customer, simply a stranger asking for a favor, and he not only treated me politely, but was going out of his way to accommodate me. He did, too—went out to another store somewhere and returned with the change I desired.

I was so pleased with him that I related my experience with the other storekeepers and asked him why he had gone out of his way for me. He said, "I was taught a lesson in politeness once that I will never forget. One day I was pretty busy with three prescriptions to be filled and delivered all at once, and trying to get through as well as I could, in spite of a headache, when a lady came in and asked me if there was anyone of the name of So-and-So living near my store, and would I kindly give her the right address, as she was a stranger in the neighborhood? I was not in the sweetest humor, I'll admit, and I turned her off rather shortly with advice that she look in the directory. I was not insulting, but I fell short of being gracious, that's sure.

"Now, do you know what happened? Her friend had asked her to come and look at a vacant house in the neighborhood. She rented the house and moved in with a delicate daughter and a rheumatic husband, and every cent that family has spent in the last three years for drugs, prescriptions, toilet articles, etc., has gone into the hands of my competitor, although he is half a square farther from them than I am.

"It has cost me a pretty penny in that time for being 'sassy,' hasn't it? I can figure it out in cash profit at about twenty-five dollars a year. That's seventy-five dollars' fine for not being polite."

"Well," I answered, "I feel so grateful to you that I will show you the rule works the other way also. I'm very much obliged. Good-day, sir."

I told my little tale when I got back to the house and that druggist has gotten just about twenty-seven dollars' worth of trade from under that particular roof since.

Here is another case that came under my notice: I was making a small purchase at a grocery store just before closing time one evening when a woman came in and asked for a bunch of parsley.

"Can't get it for you," the grocer answered. "It is packed up for the night in the ice box along with the meats. Can't open it until morning."

"Why did you refuse that woman?" I asked.

"Well, she only comes here for things when she can not get them elsewhere. She is no good to me."

Now, what do you think of that? Maybe it would have been a minute's trouble to get at the parsley, but that wasn't his reason. He wouldn't sell her what she wanted because she only came to buy from him what she could not get elsewhere. There was the best chance in the world to show her he had what some other dealer did not have and treat her in such a way that she would depend on him and come to him oftener. But he could not see that. She wanted to be a customer and he would not let her. He did not want to increase his business—just wanted to keep on selling to the old customers until they died off or moved away and left him to die of dry rot.

I did not care a snap about him or the woman, but I let him know, right there, his mistake. He saw the thing my way before I finished and I really believe my little tearing-out will do him good the rest of his life. If that woman comes in again he'll probably treat her better, anyhow, even if he can not apply the same principle to other cases. If he smiles and treats her pleasantly she will be so surprised to find he is not a Teddy Bear with a sore ear that she will deal there more than she ever would the other way.

If I have only been telling you something you know, look around a little and watch things and see if your clerks know it, and never forget it. If you have a clerk who "snaps" people off short and acts independently and is unaccommodating, chase him out of your store with an axe. Do not waste politeness on him if he can not understand its value.

Good displays give any house the reputation of being "up to date." Be "up to date." Almost all exhibits made to fit some special occasion should be changed promptly after the event has passed.

Advertising Department

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

The Jensen Hardware Co., of New Orleans, La., clearly show by their attractive advertisement that they know how and when to advertise their goods.

HOT WEATHER

IS COMING

And NOW is the time to place your order with us for

A Gas Stove

The celebrated

Quick Meal Gas Stove

Which has no equal!

Stands above all other makes.

Let us demonstrate to you and show you

How You Can Save Money.

THE Jensen Hardware Company, Limited,

FORMERLY

Eugene F. Buhler Co., Ltd.

1605 and 1607 Dryades Street.

They have selected the right article, told the story well and placed it before the public at the right time, a combination which can hardly be other than successful in advertising. No doubt good returns resulted from this announcement. It appeared in the *Daily States* of New Orleans, La., and occupied seven inches of space, single column width.

* * *

The Ringen Stove Co., St. Louis, Mo., division of the American Stove Co., have an excellent advertisement in that here reproduced. The ad. is characterized by good display, suitable type selections and by good arrangement. Cogent arguments are advanced why the "Quick Meal" gas range should appeal to those interested in gas ranges. The ad. is one which many advertisers would do well to study. It

A ST. LOUIS PRODUCT OF HIGHEST QUALITY

"QUICK MEAL" GAS RANGE

Those Who Use One of the **"QUICK MEAL" GAS RANGES** *Will Quickly Tell You of Their LOW GAS BILLS, Convenience of Stove and the Durability of Same.*

Every User Heartily Recommends It.

When You Stop to Think That 90% OF ALL GAS RANGES Used in St. Louis Are the Celebrated **"QUICK MEAL"** *You Can Easily Understand That It Is Pure Merit and Satisfactory Service Which Causes This Enormous Sale*

"QUICK MEAL" GAS RANGES are sold (including all gas connections FREE OF CHARGE) by the following dealers:

Alberts & Fisher, 3129 S. Broadway.
Ahrens, F., 1721 S. Broadway.
Becker, J. P., 3836 S. Broadway.
Boyle & Co., 4429 Manchester.
Boehl, W. F., 3134 Gravois Av.
Boehl Hdw. Co., 3202 S. Grand.
Barr, Wm. D. G. Co.
Barbour & Son, 3136 N. Broadway.
Cleary, John, 660 Goodfellow Av.
Cox & Miller, 2420 Cass Av.
Cherokee Hdw. Co., 2305-05 Cherokee.
Dan, Ferd, 3021 Cass Av.
Dooley, J. E., Furn. Co., 1402 N. Vandeventer.
Dooley, J. E., Furn. Co., 1601 N. Vandeventer.
Dooley, J. E. Furn. Co., 5107 Delmar.
Dooley, J. E. Furn. Co., 2249 S. Grand.
Doyle, F. J., 1627 S. Jefferson.
Dickey, R. O., 3330 S. Broadway.
Eiserman, F. A., 17th and Dodier St.
Eckhardt, F. & H. Co., 2908 N. Grand.
Eckhardt & Son, Grand and Gravois.
Fox, J., 2100 East Grand Av.
Ferrera & Miller, 3120 N. Broadway.
Fleck, Chas. W., 3001 S. Broadway.
Fickert, Wm., 3620 S. Jefferson.
Fredenberg, F. W., 3132 Morgan Ford.
Gregory, F. C., 4200 N. Broadway.
Gammon & Parker H. & F. Co., 3200 S. Broadway.
Geis, J. C., Sewing Machine Co., 4706 Bingen Av.
Geis, J. C., Sewing Machine Co., 1313 North Market.
Greenfelder, A. M., 3020 Cass Av.
Gibson Furn. Co., 2611 Wash St.
Gaerges Bros., 1212 N. 12th St.
Hayes Stove and Hardware Co., East St. Louis.
Hellmann & Gogan, 1600 and Cass Av.
Hellmann, E. G., 4001 Florissant Av.
Hoffman, Fred, 4022 Manchester.
Hahn, John P., 2924 Cherokee.
Henninger, F., 1818 S. 18th St.
Heckman, E. C., Grand and Juniata.
Hub Furn. Co., Broadway and Washington.
Ingalls, F. H., Merc. Co., 3720 Olive St.
Jaeger-Schmidt Furn. Co., 2022 Cass Av.
Jarolimek, Frank, 1400 S. 12th St.
Koch, Martin, 2012 Manchester.
Kiss, L., 1001 Arsenal.
Kalamazoo Carpet Co., 2240 S. Broadway.
Kemp, H. D., 1816 S. Broadway.
Krist, M., 2204 Cherokee Av.
Kottler, W., 4001 Lee Av.
Kohnert Furn. Co., 2200 N. 11th St.
Kohnenkamp, F., 3002 N. Grand Av.
Koch, Bittner & Ruffner, 2143 Benton.
Kaufman, H., 2708 N. 14th St.
Lombardi, J. & L., H. F. Co., 2001 Florissant Av.
Linder, B., 4200 Old Manchester.
Laughlin, Chas., 2142 Clarkson.
Lehman, G., Clayton and Union Ave.
Laclede Hdwe. Co., 2001 Laclede.
Laclede Gas Light Co., 716 Locust St.
Mannheimer, F. & Carter Co., 2014 Franklin Av.
Montgomery Hdwe. 3217 Meramec.
Mar, John, 2633 Cherokee.
Mueller, Fred, 1721 S. 7th St.
Marx & Neun, 1800 S. 11th St.
Morsch, Geo., 1500 Kennett.
Mitchell Furn. Co., 112 N. 12th St.
Monnig, J. H., 3000 Salisbury St.
Niemeier & Kistenmacher, 306 N. Broadway.
Nottleck & Albrecht, 4200 Florissant.
Nelson, J. H., 2002 Prairie Av.
Meyer, Bros., 2030 Gravois Av.
Neeb's H. F. Co., 1123 Olive St.
Nash Bros., 2227 Cass Av.
Rehmeyer & Flint H. F. Co., 4201 Easton Av.
Reach Carpet Co., 1342 S. Broadway.
Rost, Wm., 1201 S. Jefferson Av.
Rinne, George, 2101 Iowa.
Sommers, C. Furn. Co., 1128 Olive St.
Stack, H., 2101 Arsenal.
Sula, C. C., 1401 S. 12th St.
Sula, C. C., 2020 S. 12th St.
Schlueter, F., 1300 S. Broadway.
Schmitz, Vandervoort & Barney.
Schmidt, Frank L., 3622 S. Broadway.
Schatz, John, California and Chippewa.
Schulz, J., 1000 McNair Av.
South End Hdwe. Co., 2907 Gravois.
Schroeder, H., 3020 Dunn.
Star Furn. Co., 1548 S. Broadway.
Scotten-Stickney Stove and Range Co., 13 S. Broadway.
Stark-Peterman F. Co., 1421 Salisbury.
Smith, Joe, 922 N. 7th St.
Smith & Kohn, 3101 Easton Av.
Schmidt, F., 1422 Salisbury St.
Schraube, F. A., 2000 Hebert.
St. Louis House Furn. Co., 902 Franklin Av.
Taylor Av. Hdwe. Co., 1120 N. Taylor.
Tonnemann, J. C., 2001 Chouteau.
Tolmeyer & Co., 2001 S. Grand Av.
Union House Furn. Co., 710 Franklin.
Wuennenberg & Schling, 1421 S. Broadway.
Wurtz, Jacob, 1916 S. Broadway.
Wilhoeft, M. A., 1814 Sidney.
Wahlwend, N. C., Hdwe. Co., 7277 Manchester.
Webber J. C. & Son, Clayton, Mo.
Walker Furn. Co., 208 N. 12th St.
West End Hdwe. Co., 624 N. Taylor.
Zacharias Wm., 1700 Park Av.
Zegenmeyer, J., 1522 Franklin Av.
Zentner, Dan., 7202 Tuckle Av. (Walnut Park).

RINGEN STOVE CO., (Div.) SIXTH, NEAR LOCUST.

appeared in the *St. Louis* (Mo.) *Globe-Democrat* of recent date and took up 9¼ inches of space, three column width.

* * *

The George Krause Hardware Co., Lebanon, Pa., have a very timely advertisement in the one here illustrated, which appeared in a recent issue of the *Lebanon* (Pa.) *News*. Baseball goods are in demand at this time of the year, and very good reasons have been given in this announcement why Reach Official League Balls and other baseball goods are bound to

These Important Leagues HAVE ADOPTED THE Reach Official League Ball

AMERICAN LEAGUE
TRI-STATE LEAGUE
LEBANON CITY LEAGUE
AMERICAN ASSOCIATION,
SOUTHERN ASSOCIATION

Play With the Best

Every Ball Guaranteed to last a Game of 9 innings.

We carry the largest and most varied line of Baseball Goods in Lebanon. Right and Left Handed Gloves in stock.

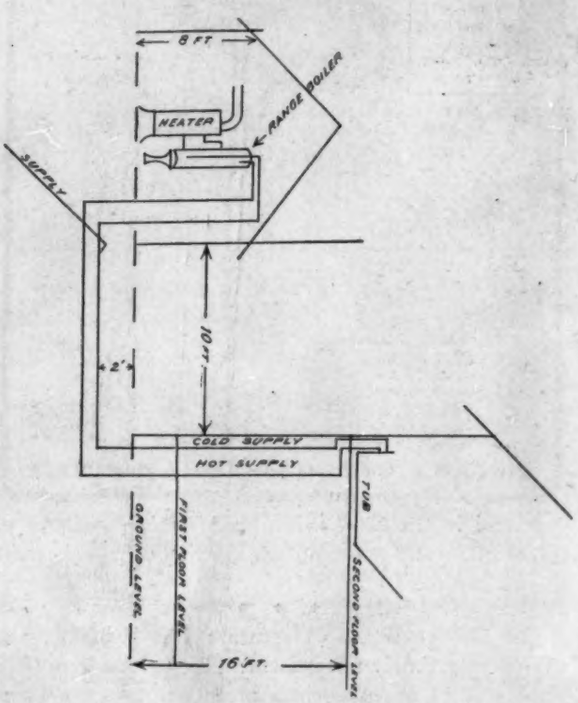
George Krause Hardware Co.,
35 South Eighth Street.

prove satisfactory. The George Krause Hardware Co. should feel very well satisfied with this advertisement, which occupied four inches of space, double column width, in the paper above mentioned.

Heating and Ventilating

"OLD PLUMBER'S" REPLY TO THAT PLUMBING PROBLEM.

In THE AMERICAN ARTISAN of June 19, George F. Chapman of the Chapman-Baertich Company, Linton, Ind., submitted an elevation plan (appearing again herewith), showing a bath tub on second floor, 18 feet above water heater, and to which it was sought to deliver hot water. It was stated that, on account of the buildings being 10 feet apart, it would be necessary to carry the hot water pipe underground



Elevation Plan, Showing Bath Tub on Second Floor, 18 Feet Above Water Heater.

beneath the boiler level, in order to prevent freezing. Information was requested regarding the way to pipe with a circulating pipe so as to keep the water warm on the second floor.

In connection with this problem THE AMERICAN ARTISAN presents herewith an opinion expressed by "Old Plumber."

To THE AMERICAN ARTISAN:

The problem of heating water to be carried underground to a building 10 feet distant from the boiler, is something difficult to do. It can be done, but it is very doubtful whether it would be satisfactory for any length of time. The success of this method depends largely on the pressure of water supplied to the boiler, and also on how the pipe is run and connected to the heater and the tub.

"OLD PLUMBER."

Business is no longer done in a whisper. You must talk right up in meeting if you are to get what you are looking for.

THAT FURNACE QUESTION SUBMITTED BY ZIMMERMANN'S BUILDING SPECIALTIES CO. LTD.

To THE AMERICAN ARTISAN:

In regard to the heating problem presented in THE AMERICAN ARTISAN of June 26 by Zimmermann's Bldg. Specialties Co., Ltd., New Orleans, La., in which is involved the lasting qualities of a warm-air furnace for performing the special work required of it, I would say that to heat a drying room for enamel, the furnace should stand close to a wall so that the front of the furnace would be in one room, but the furnace itself would be located in the drying room. No dust from coal or ashes would in this way get into the drying room. The furnace should have a casing, reach to about 12 inches above the floor, and should be open at the top. This would insure almost the same temperature in all parts of the room, the air being constantly drawn from the floor to the furnace.

I am not sure that this method would always be satisfactory, but I don't know of any better way. So long as the air can get to the furnace in the manner described, I don't see why a cast-iron furnace with cup joints should not last a long time.

In order to write intelligently regarding this heating problem, there should be furnished a plan of the room to be heated, showing windows, if any, area of room and shape, location and area of chimney flue. It would also be desirable to know whether the building is of brick or wood construction, whether the ceiling is plastered and what is the nature of the floor, also whether the surrounding walls are of brick or of plaster on lath.

CHARLES SMITH.

Chicago, June 30, 1909.

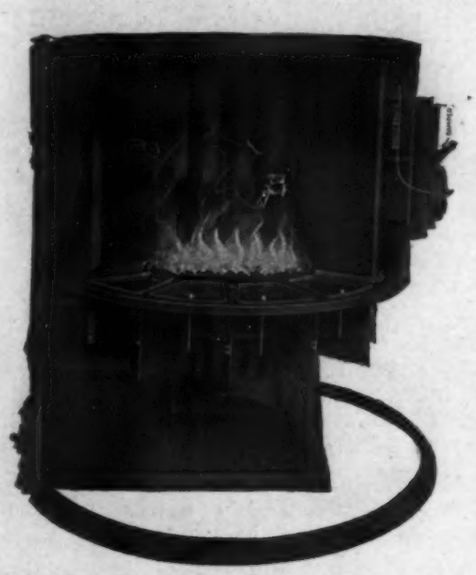
CATALOGUE NO. 24 OF F. MEYER & BRO. COMPANY.

F. Meyer & Bro. Company, Peoria, Ill., have now ready for distribution their catalogue No. 24, which they state contains everything needed for setting warm-air furnaces. Considerable space is devoted in the catalogue to a description of the Improved Handy Furnace Pipe and Fittings, with numerous illustrations of same. This pipe is declared to have perfect fitting joints and to be perfectly ventilated. It is made of heavy bright tin. On page 2 of the catalogue is a cut showing the exact space between the inner and outer pipe, also the joints. The "Handy" Furnace Pipe is shipped in any quantity desired, but for convenience F. Meyer & Bro. Company pack it in four, six and eight-stack cases. All the company's round pipe and elbows are seamed, no solder being used in their construction. Within the last year the company have greatly improved their adjustable elbows, all of which are made by machinery of special design. All elbows up to and including 14-inch are made with a very deep bead, so that they can easily be adjusted without undue exertion, and will not telescope nor collapse. All large galvanized elbows from 16 to 30-inch are made with an extra deep bead and

are held together by means of a wrought iron angle, fitted with screw bolts. By loosing these bolts any angle can be made, and by drawing up the bolts the elbow will be absolutely rigid. F. Meyer & Bro. Company state that in appearance these elbows are all that any mechanic can desire. In usefulness they are equally as desirable. The company's nested cold air pipe can be put together at the job without any tools or stakes. First the edges are locked by merely putting them together; next, the three notches at each end and in the center of the pipe are turned over the seam, which prevents it from telescoping. If desired, the seam can then be hammered down, although this is said not to be necessary. Among the other articles listed in the catalogue may be mentioned the following: Nested tin hot air pipe, register boxes, cold air shoes, casing bonnets, tin plate for furnace pipe, single pipe and fittings, Foster's side wall registers, Jones' registers and cold air faces for side walls, Tuttle & Bailey registers, wood register faces for cold air ducts, clinker catchers, etc. When writing F. Meyer & Bro. Company for catalogue No. 24, kindly mention THE AMERICAN ARTISAN.

THE "FAULTLESS" SCIENTIFIC HEATER.

The Graff Furnace Co., 208 Water street, New York, state that their "Faultless" Scientific Heater



Flue Construction, Fire-pot and Extension Flue Partitions of "Faultless" Heater.

will enable the dealer to obtain the best heating work at good prices. They state that this furnace is of the highest grade construction and that it possesses a number of distinctive features which will commend themselves to the trade. The illustration herewith shows the flue construction, fire-pot and extension flue partitions of the "Faultless" heater. The fire-pot is sectional and extra heavy, the size at the bottom being the same as at the top, affording extra large grate surface. All flues overhang the fire, which passes entirely around each flue. The Graff Furnace Co. request the trade to write for their catalogue. When doing so, kindly mention THE AMERICAN ARTISAN.

THE "MONCRIEF" WARM-AIR FURNACE.

Henry & Scheible Company, 825-829 Long Avenue, N. W., Cleveland, Ohio, say that dealers can build up a good furnace business by handling the "Moncrief" Top Return Flue Warm-air Furnace, manufactured by them, and illustrated herewith. Simplicity, durability and economy together with serviceability are prominent and meritorious features of this furnace, according to the manufacturers. The "Moncrief" is of very substantial construction and is built to render efficient service. Henry & Scheible Company request the trade to write them for their catalogue. When doing so, kindly mention THE AMERICAN ARTISAN.

The "Moncrief" Furnace.

THE "SUCCESS" WARM-AIR FURNACE.

Richardson & Boynton Company, Chicago, New York and Boston, report that their "Success" Furnace, here illustrated, is having a very successful run and that its popularity with the trade is becoming more and more marked. The "Success" is constructed upon

The "Success" Furnace.

scientific principles and is declared to be a thoroughly efficient, up-to-date warm-air furnace in every particular. Richardson & Boynton Company will be pleased to forward literature, describing in detail the construction and operation of this well-known furnace. When writing for it, kindly mention THE AMERICAN ARTISAN.

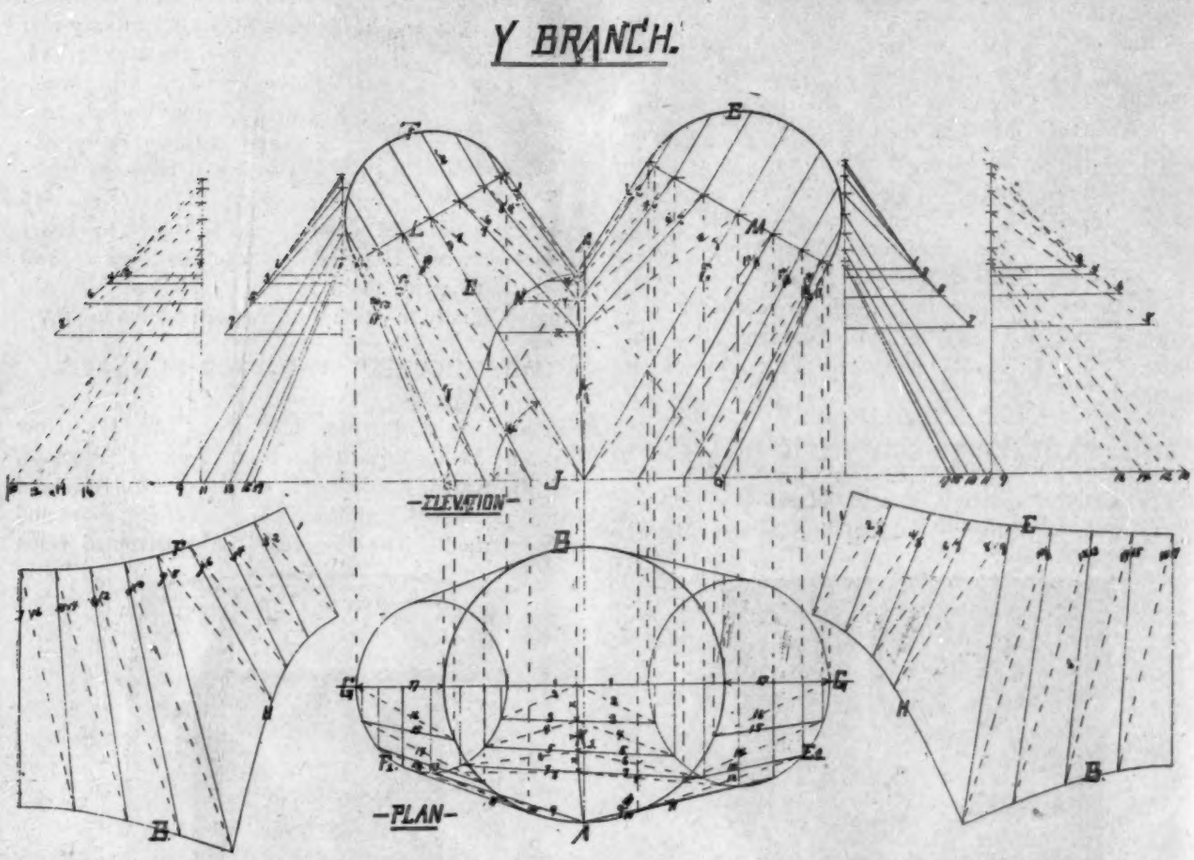
A clean and orderly store is the cheapest advertisement a merchant ever had.

Tinshop

"Y" BRANCH OF DIFFERENT DIAMETERS.

BY G. L. GRAY.

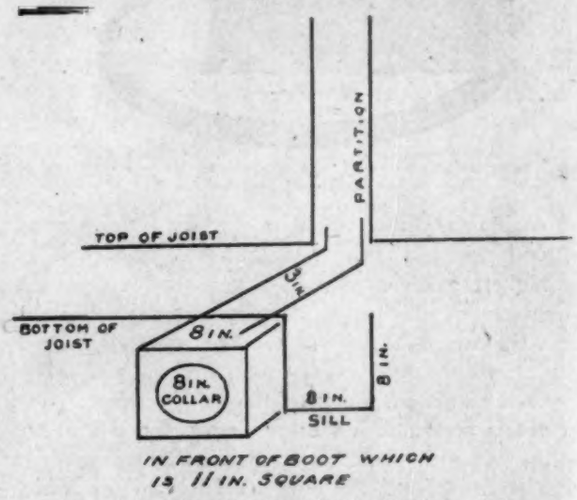
First draw center lines *AA* and *GG;* draw base circle *B* the size wanted, and space same into a convenient number of equal parts. Draw center lines *C* and *D*, and half-circles *E* and *F* the size desired, and space half-circles *E* and *F* into the same number of equal parts as in half-circle *B*. Draw lines *1* and *17* of elevation, intersecting base line *J* at *O O*, and draw miter line *K*. In this drawing one branch is two and one-half, and the other three inches. Now we are to get the true section of *H*, and we must take the difference between two and one-half and three inches which is two and three-quarters and strike sweep *H*, and draw straight line from *O*, intersecting sweep *H*, which gives the true section through *K*. Space one-quarter circle *H* into four equal parts, but only use three, as the straight line represents the fourth space. Draw lines *X Y Z* from points in sweep *H*, intersecting miter line *K*. Next erect dotted lines from half-circle *B*, intersecting line *J*, and straight lines from points in half-circles *F* and *E*, intersecting lines *L* and *M*, and from these points on lines *L* and *M*, draw lines *1, 3, 5, 7*, intersecting lines *X, Y, Z*, at line *K*. Also draw lines *9, 11, 13, 15*, intersecting dotted lines of corresponding numbers on line *L*. Drop dotted line from miter line *K* to line *G G;* then draw miter line K_1 in plan. Next drop dotted lines from all points on lines *L, M*, through plan and develop profiles of circles E_1 and F_1, and draw base lines as shown in plan *1* to *17*. Next construct triangles, using lines *1* to *17* in plan as base lines and project lines from points in elevation for height of angles, and draw the true length of lines as shown. Draw a separate pattern of each branch, using spaces between lines the same as in circles on same letter.



WHO CAN SOLVE THIS PROBLEM ?

To THE AMERICAN ARTISAN:

I have a problem to present to your readers and am herewith submitting a plan of what I want. The joist is 10 inches high and sits on a still 10 inches square, the partition setting approximately in the center. I would like to obtain a pattern from an 8-inch round to 3x10-inch oblong wall stock. The round—I want to be able to turn the boot in any angle, something like



Drawing Showing What Is Wanted.

this: I must start off the boot with about 45 degrees so that I can use a 45-degree stock angle.

Can the pattern be cut to get 45 degrees on the 8-inch round end and 45 on the 3x10-inch end, or 22½ on the round end and 22½ on the 3x10-inch end? If so, I want it as short as possible.

I have several of these patterns to get out for several sizes of round to squares. I trust that some of the readers of your valuable paper will give me the information needed. OLD TINNER.

THE "CANTON" VENTILATOR.

The Canton Mfg. Co., Canton, Ohio, manufacturers of cornice, skylights, metal ceilings, eaves trough, conductor pipe, etc., have brought out the "Canton" Ventilator, shown in the illustration. It is made with

The "Canton" Ventilator.

metal and glass top and with and without automatic closing device. The manufacturers state that the demand for these ventilators is increasing, for the reason that they are constructed on honest lines and because of the efficient service that they perform. When writing for illustrated literature, kindly mention THE AMERICAN ARTISAN.

THE POWERS AUTOMATIC CHIMNEY TOP.

The accompanying illustration shows the Powers Automatic Chimney Top that has been placed on the market by Powers & Williams, Streator, Ill. It is furnished with iron mountings only or complete with cover and vane. It is said to have double the sale and triple the efficiency of smoke-stacks. Powers & Williams state that it has become very popular with the trade and that the demand for it is steadily increasing. They invite correspondence, and request dealers to write them for prices on skylight glass and metallic skylights. When writing, kindly mention THE AMERICAN ARTISAN.

Powers' Automatic Chimney Top.

ANNOUNCEMENT OF WM. FOSTER & SONS CO.

Wm. Foster & Sons Co., 1000 E. Carpenter St., Springfield, Ill., manufacturers of metal ceilings, zinc ornaments, etc., have issued a very attractive postcard intended to impress upon the trade the fact that they manufacture metal ceilings and ship promptly. They state that since they began the manufacture of metal ceilings a few years ago, their business has increased tenfold, placing them in the front rank of metal ceiling manufacturers of the country. Their modern, up-to-date plant is surrounded by exceptional facilities for shipping, and they state they are in a position to meet the demands of architects, contractors, sheet metal workers and builders efficiently and promptly. When writing Wm. Foster & Sons Co., kindly mention THE AMERICAN ARTISAN.

BISHOP'S QUICK-WORKING FORMS.

The accompanying illustration shows a quick working form that the Bishop Hardware Co., Dowagiac, Mich., have put on the market. They are used for closing the end of eaves-trough in corrugations. The company state that with these forms an end can be closed much more quickly, neatly and cheaply than in any other way. When a trough is cut, an end can be put in both parts, thus making no waste. They state that frost will not burst the end out, and that old work can be closed from a ladder. The form is made in five sizes, 3½, 4, 4½, 5 and 6. When writing the Bishop Hardware Co., kindly mention THE AMERICAN ARTISAN.

Bishop's Quick Working Form.

A BOOKLET DESCRIBING MONEL METAL SHEETS.

The American Sheet & Tin Plate Co., Frick Bldg., Pittsburgh, Pa., have just gotten out a new booklet which is devoted to valuable information concerning Monel Metal Sheets, manufactured by them. Like all the advertising literature issued by the American Sheet & Tin Plate Co., the booklet in question is characterized by neatness and attractiveness. It is printed in two colors and may well be termed a work of art of the highest order. A bird's-eye-view of the immense Vandergrift Works at Vandergrift, Pa., where these sheets are manufactured, is shown in the booklet, and there are illustrations showing the many and varied uses to which this material can be put. A picture is also shown of the Pennsylvania Railroad Terminal in New York City, which is covered with Monel Metal Sheets. Two very interesting tables, one giving the physical properties of Monel Metal, and the other, standards for rolling, are given in the booklet.

Monel Metal, say the manufacturers, is a new product which means much to the sheet metal worker, the roofer and the manufacturer, because of its great range of adaptability and large field of usefulness. It is a natural alloy in guaranteed proportions of 68 to 72 per cent nickel, 1½ per cent iron and the balance copper. In smelting and refining the ore, the nickel and copper are not extracted or separated, and, therefore, are found in the finished product in the same relative proportions. Monel Metal is ductile,

flexible, easily worked and can be drawn, spun, seamed or polished. It can be formed up into suitable shapes and bent into such locks as go, for instance, with standard seam roofing. It can be soldered readily with a killed acid, and can be brazed with ordinary brazing solder. It is declared to be as non-erosive and non-corrosive as pure nickel. It is claimed for this metal that it has the important property, particularly as compared with copper, of showing relatively smaller expansion and contraction changes. Its tensile strength is said to be approximately three times as great as copper. Monel Metal Sheets are furnished by the American Sheet & Tin Plate Co. in sizes up to 36x96, and in all gauges. The American Sheet & Tin Plate Co. will be glad to furnish any readers of THE AMERICAN ARTISAN, who are interested, with copies of their booklet describing these sheets. When writing, kindly mention this paper.

A COMPLETE OUTFIT FOR WORKING SHEET METAL PIPES.

This is what is said of the Combination Pipe Fitter that the Blumer-Doscher Mfg. Co., 408 Crescent street, Brooklyn, N. Y., are now introducing to the trade. It is really three tools in one, being slitting shears, shears, and a crimper. It may be closed and carried in the pocket. The manufacturers say that the working parts are all of the best steel, and any part may be duplicated. The tool is warranted in every respect. The crimps are one inch long and any depth required. The combination pipe fitter will crimp as thick as No. 24 gauge and cut as heavy as No. 18 gauge. It is said to be indispensable in putting up stove, leader and heater pipe. For making elbows in leader or conductor work the pipe can be cut, without loss of material, to any desired angle. When writing for circular and prices, kindly mention THE AMERICAN ARTISAN.

NOTES AND QUERIES.

PERFORATED ALUMINUM.

From C. DeWitt Wagner, Cedar Rapids, Ia.

Where can I buy perforated aluminum?

Ans. Acme Advertising Co., 55 State St., Chicago, Ill.; Harrington & King Perforating Co., 212 N. Union St., Chicago, Ill.

"QUAKER" BREAD PANS.

From the Ocheyedan Hardware Co., Ocheyedan, Iowa.

Where can we get the "Quaker" Bread Pan?

Ans. Republic Metalware Co., Buffalo, N. Y., and 1532 Wabash Ave., Chicago, Ill.

PREPAY GAS METERS.

From Morrison & Dayton, Gilmore City, Iowa.

Will you kindly send us the address of some firm making Prepay Gas Meters for gasolene city gas?

Ans.—American Meter Company, 99 S. Jefferson street, Chicago, Ill.

ITEMS.

The Michigan Stamping Company, Detroit, Mich., whose plant was recently destroyed by fire, will rebuild at once. The new building will be larger than the old one and will be constructed of brick.

Miles Ayrault, Sr., president of the National Roofing Company, Tonawanda, N. Y., died recently. He had been ill for a number of years.

The Washington Standard Slate Co., 419 Market Street, Camden, N. J., has been capitalized at $100,000 to manufacture slate for roofing and other purposes. The incorporators are: L. S. Larrabes, A. B. Forncrook and J. B. Graham.

The Macdonald Roofing Company of New York city has been incorporated with a capital stock of $10,000. The incorporators are: John T. Gilman, Litchfield, Maine; Dennis E. Buckley, Amsterdam avenue, and Harry A. Forgie, 556 West 184th street, both of New York city.

Follansbee Brothers Company, Pittsburgh, Pa., advise that 80 squares of Follansbee Banfield Process Roofing Tin will be used on the roof of the new machine shop that is being erected by the Indianapolis Rubber Co., 549 E. Georgia Street, Indianapolis, Ind. The company guarantee this plate to last not less than 15 years.

The Bassett-Presley Company, Cleveland, Ohio, advise that they carry in stock "Apollo" Galvanized Sheet Steel, "American" Bessemer Sheet Steel and Blue Annealed Sheet Steel. They state that they have a very complete assortment, and they request the trade to write for prices. When doing so, kindly mention THE AMERICAN ARTISAN.

Tanner & Company, "The Quick Shippers," Indianapolis, Ind., state that they carry the largest and best assorted stock of roofing plates in the United States—20 different grades, both steel and charcoal iron. They state that the piles in their warehouse are high but that the prices are low. When writing Tanner & Company, kindly mention THE AMERICAN ARTISAN.

The W. H. Mullins Company, 209 Franklin Street, Salem, Ohio, state that they have ready for immediate shipment at attractive prices an immense stock of stamped zinc architectural ornaments for cornice makers and the building trades. They request the trade to write them for their large ornamental catalogue No. 9H. When writing, kindly mention THE AMERICAN ARTISAN.

The J. E. Whitacre Mfg. Co., Rockford, Ill., manufacturers of one-piece miters and sheet metal specialties, are distributing a post-card showing their "Royal Gem" Gas Machine. The photograph was taken at night by the "Royal Gem's" own light. The company report that their gas machines wherever introduced are becoming very popular and that they are selling more of them than ever.

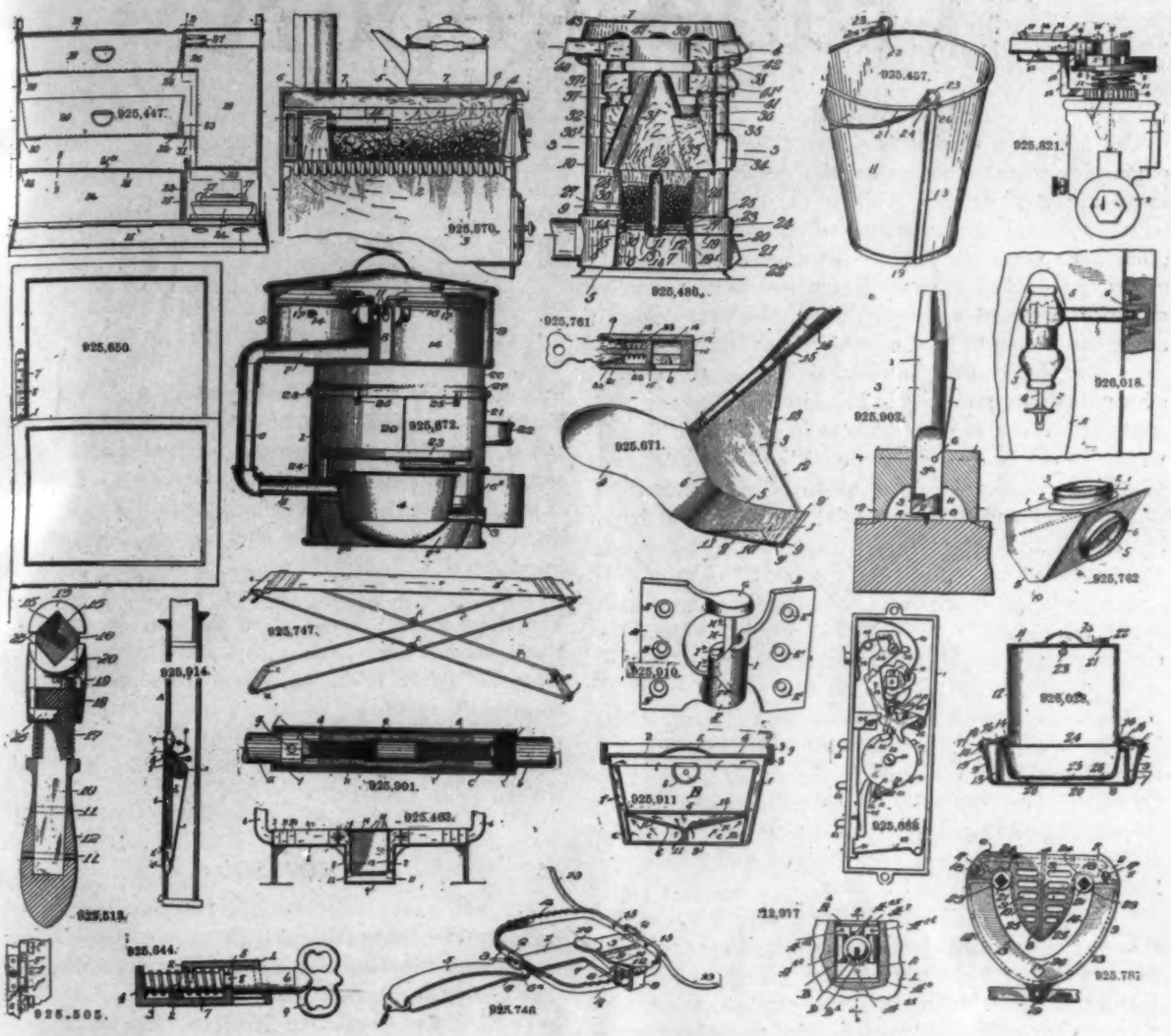
CAN'T GET ALONG WITHOUT IT.

To THE AMERICAN ARTISAN:

Enclosed please find subscription to THE AMERICAN ARTISAN. We are well pleased with your paper and cannot get along without it. STEINER & BERGER.

Salem, Ore., 188 Liberty Street, June 23, 1909.

NEW PATENTS.



925,447. Lunch Box. Peter J. Bird, New York, N. Y., assignor to Mary A. Bird, New York, N. Y. Filed July 17, 1908. Serial No. 444,122.

925,457. Pail. Andrew Cleveland, Canby, Minn., assignor of one-half to Thomas O. Rock, Canby, Minn. Filed April 29, 1908. Serial No. 429,967.

925,463. Feed Cooker. Lorenzo D. Dewey, 2d, Detroit, Mich. Filed Jan. 16, 1909. Serial No. 472,651.

925,486. Furnace. Frank S. Lang, Seattle, Wash. Filed June 5, 1908. Serial No. 436,934.

925,505. Reversible Supporting Plate for Adjustable Hinging Strips for Doors. Lewis S. Prentiss, Oklahoma, Okla. Filed Aug. 8, 1908. Serial No. 447,602.

925,513. Wrench. Robert M. Ryan, New York, N. Y. Filed Aug. 31, 1908. Serial No. 450,940.

925,570. Hot-Air Forming and Feeding Device for Heating Apparatus. Julius Eckert, Denver, Colo. Filed Feb. 15, 1909. Serial No. 478,000.

925,644. Sash-Lock. Jacob C. Luden, Reading, Pa. Filed Apr. 22, 1909. Serial No. 491,418.

925,650. Window Sash Lock. Frederick D. Raforth, Dubuque, Iowa, assignor to Lorenzo O. Hillyard, Dubuque, Iowa. Filed Dec. 21, 1908. Serial No. 468,567.

925,671. Lawn Trimmer. Cornelius E. Waters, Los Angeles, Cal. Filed June 22, 1908. Serial No. 439,794.

925,672. Cooking Apparatus. Henry A. Winterknight, Philadelphia, Pa. Filed May 26, 1908. Serial No. 435,168.

925,688. Combination Lock. Josiah Deal, Canton, O. assignor to The Dayton Keyless Lock Company, Dayton, Ohio, a Corporation of Ohio. Filed Aug. 5, 1907. Serial No. 387,-053.

925,746. Animal Trap. Thomas Booth, Boise, Idaho. Filed Nov. 24, 1908. Serial No. 464,205.

925,747. Support for Razor Strops. Herbert N. Breneman, Milwaukee, Wis. Filed May 8, 1908. Serial No. 431,-633.

925,761. Lock. Peter S. Dunn, New Haven, Conn., assignor of one-third to Thomas F. Fitzsimmons and one-third to David E. Fitz Gerald, New Haven, Conn. Filed Apr. 25, 1908. Serial No. 429,149.

925,762. Furnace Pipe Fitting. Harry B. Eager, Niles, Mich. Filed Nov. 14, 1907. Serial No. 402,183.

925,787. Grate. James Reagan and William Reagan, Philadelphia, Pa.; said William Reagan assignor to said James Reagan. Filed Sept. 4, 1908. Serial No. 451,641.

925,821. Door Check. Worthie W. Morey, Columbus, Ohio. Filed July 9, 1908. Serial No. 442,730.

925,901. Turnbuckle. William Hardick, Cadillac, Mich. Filed Nov. 25, 1908. Serial No. 464,502.

925,903. Auger-Bit. Lawrence P. Harris, Terrell, Tex. Filed July 18, 1906. Serial No. 326,756.

925,910. Hinge. Henry E. Hoke, Hanover, Pa. Filed Dec. 14, 1908. Serial No. 467,376.

925,911. Camper's Bake Pan or Oven. Arie Huyser, Colorado Springs, Colo. Filed Jan. 8, 1909. Serial No. 471,-367.

925,914. Combined Window Lift and Lock. Iver Johnson, Tacoma, Wash. Filed Dec. 14, 1906. Serial No. 347,831.

926,018. Door and Like Fastener. Frederick G. Parker, Sr., Alameda, Cal. Filed June 3, 1908. Serial No. 436,361.

926,028. Household Utensil. Stephen D. Smith, Atlanta, Ga. Filed May 1, 1908. Serial No. 430,405.

Reissue.—12,977. Lock. Levin Faust and Frank G. Hogland, Rockford, Ill., assignors to National Lock Company, Rockford, Ill., a Corporation of Illinois. Filed Aug. 29, 1906, Serial No. 332,558. Original No. 804,835, dated Nov. 21, 1905, Serial No. 252,089.

Trade Report.

HARDWARE.

The hardware market is quiet. The general tone continues irregular but prices for goods in best demand are held firmly. This is particularly true of wire nails and wire products generally. On some other lines, however, there is more or less shading of prices to stimulate a demand or where some specially attractive business can be gained. The best demand at present seems to be for builders' hardware and for tools used for builders' purposes. The large amount of new building going on in this city is, of course, the immediate cause for the demand in this line of hardware. In one or two other special lines a fair amount of activity is noted. In a broader way the market is not stimulated by these isolated cases of activity, but is waiting for a more definite trend from the outcome of the year's crops. At present the crop outlook is quite satisfactory. The demand for wire nails is not very heavy. There is only a quiet demand for cut nails, and prices are unchanged. Barb wire is quiet.

The base price of wire nails at the mill for jobbers is $1.70 per keg. The base price is $1.75 at the mill for full carloads and $1.90 at the mill for less than carloads. The base price of cut nails at the mill for jobbers is $1.80 per keg. The base price is $1.85 for full carloads at the mill, and $1.90 for less than carloads at the mill.

In the Chicago market wire nails are quoted as follows: Wire nails, jobbers' car lots, $1.93; retailers' car lots, $1.98; $2.05 out of store; painted barb wire, jobbers' car lots, $1.93; retailers' car lots, $1.98, with 30 cents for galvanizing; plain wire to jobbers in car lots, $1.93, and to retailers in car lots, $1.98.

Copper slating nails are quoted at 22 cents.

An advance of 10 per cent in the price of boring machine and nut augers has been announced by some manufacturers. The market for augers and bits is in a satisfactory condition and there is a good demand for these articles.

TIN PLATE.

The market for tin plate is somewhat quiet, though prices are regular. Owing to the threatened strike of the Amalgamated Association of Iron, Steel and Tin Workers against the open shop decree of the American Sheet & Tin Plate Co., many heavy orders for tin plate were placed by consumers during the month of June. For 100-lb. I. C. coke plates the price is $3.45 Pittsburgh, subject to a rebate of 5 cents per box on large orders.

Quotations are as follows:

American coke, tin, I. C., from store, New York:

Bessemer steel, 100 lbs., 14x20	$3.95@4.00
Bessemer steel, 95 lbs., 14x20	3.85@3.90
Bessemer steel, 90 lbs., 14x20	3.75@3.80
Am. charcoal terne, 8-lb. coating:	
Worcester grades, 14x20, 107 lbs	4.05@4.10
Worcester grades, 14x20, 100 lbs	3.90@3.95
Worcester grades, 20x28, 200 lbs	7.75@7.85

For prompt shipment, f. o. b. mill:

Coke, tins, 14x20, I. C	3.60@3.65
Coke, tins, 14x20, 100 lbs	3.45@3.50
Coke, tins, 14x20, 95 lbs	3.40@3.45
Coke, tins, 14x20, 90 lbs	3.35@3.40
Charcoal terne, 20x28, I. C	7.05@7.10
Charcoal terne, 20x28, 200 lbs	6.75@6.80

Usual difference for odd sizes and weights:

SHEETS.

Demand for sheets has improved slightly. The United States Steel Corporation last week operated 138 sheet mills against 130 the previous week. Independent operations have slightly increased. Building of new sheet mills is not confined to the United States, since within the fortnight the Canada Tin Plate & Sheet Steel Co., Morrisburg, Ontario, has placed a contract with a Canton concern for four new mills. The sheet market stands about the same as formerly, black sheets being 2.20 cents and galvanized 3.20 cents on fairly desirable orders, these prices being occasionally shaded a dollar a ton. Corrugated roofing is nominally $1.55 for painted and $2.80 for galvanized, per square, these prices being sometimes shaded $1 to $2 a ton.

COPPER.

There is a very quiet movement in ingot copper, especially from the producers who are well sold ahead and are not looking for business at any concession. The low prices recently reported as having been made have been by speculative interests, and there is no doubt that some of those who bought freely earlier in the month have been lately trying to unload. It is not believed, however, that there has been any movement of size in this direction, as the consumers filled their immediate requirements some time since.

The large producers and selling agencies continue to hold their copper at 13¾c, but outside operators have sold electrolytic as low as 13¼c, though they are now holding their stocks at 13½c, the foreign demand having improved, with a corresponding improvement on this side. There is said to be little unsold August copper, and the next buying movement will call for September-October deliveries. It is expected that the July report of the Copper Producers' Association will show a further decrease in stocks.

Sheet copper is unchanged, the base price at the mill being 17c. Small lots are selling at 18c base. Prices on seamless brass pipe are steady at 18c lb. for ¾ to 3-inch, inclusive.

Extreme fluctuations for the year:

	Highest.	Lowest.
Lake	14.55	12.55
Electrolytic	14.25	12.12½
Casting	14.12½	12.00
London, spot	£64 2 6	£54 12 6
London, future	64 17 6	55 10 0
London, best selected	67 15 0	59 0 0

SPELTER.

Spelter is very strong, though the changes in prices for the week have been moderate. New York is unchanged at 5.45c for spot and July. St. Louis is quoted at 5.32½c.

ALUMINUM.

There is a fair demand for aluminum and prices are firm. No. 1 ingots for melting are offered at 24c per pound in ton lots, and No. 2 ingots at 23@25c in carlots for 90 per cent pure. Rods and wire are being held at 32c a pound in ton lots, and sheets at 32c a pound in ton lots.

COKE.

The coke market is active and the demand is fairly brisk. This is the time of the year when coke is active as consumers are negotiating for deliveries in the latter part of the year. Best grades of foundry coke are quoted at $2.25. Deliveries in the latter part of the year are being negotiated on a basis of $2.25 and upward. Prices on furnace coke are steady and range from $1.75@1.90.

IRON BARS.

There is a fair demand for iron bars and the general tone of the market is firm. Prices are held steady and unchanged. Quotations are as follows: 1.40@1.45c for best refined bars and 1.35@1.40c for the ordinary.

PIG IRON.

There has been a general stiffening up in the pig iron market both in the Alabama district and also in the Pennsylvania and western New York field. Business is very good in New York and the Middle West and a good deal of iron is selling. Some advances have already been made in the selling quotations, and there is a well defined belief that the future will see a very material advance in prices, following the expected improvement in the demand.

There are some good inquiries in the market from New England foundry men, though they are not buying very freely at present. They are melting a good deal of iron, but supplied their most pressing needs some time since, and consequently there is now less activity in New England than in other sections. Virginia is firm and unchanged at $14@14.50 ton, Roanoke.

In the Pennsylvania fields there is a very much firmer feeling prevailing, and prices have been generally advanced 25@50c per ton. Steel making irons are especially strong, and $15 ton is now the minimum price in the valley for malleable, foundry or basic iron, and $15.50 ton for standard Bessemer iron. Foundry iron for New England delivery is quoted higher at $18@18.50 ton.

CHICAGO MARKET.

Lake Superior charcoal	$19.50@20.00
Northern foundry No. 1	17.00@17.50
Northern foundry No. 2	16.50@17.00
Northern foundry No. 3	16.00@16.50
Southern foundry No. 1	16.85
Southern foundry No. 2	16.35
Southern foundry No. 3	15.85
Southern foundry No. 4	15.35
Southern No. 1, soft	16.85
Southern No. 2, soft	16.35
Southern gray forge	14.85
Southern mottled	14.60

PITTSBURG MARKET.

Bessemer, valley	15.25@15.50
Bessemer, Pittsburg	16.15@16.40
No. 2 foundry, Pittsburg	15.90@16.40
Gray forge, Pittsburg	14.90@15.15
Basic, valley	15.00@15.25
Basic, Pittsburg	15.90@16.15

BIRMINGHAM MARKET.

No. 1 foundry	12.00@12.25
No. 2 foundry	11.50@11.75
No. 1 soft	12.00@12.25
No. 2 soft	11.50@11.75

Rogers, Brown & Co., Cincinnati, say in their weekly report:

"The market is without any special interest beyond a firmer tone and rumors of advance in prices on Southern iron. Sales are in fair volume in this territory and some grades are scarce. Steel making and forge irons are in good demand and the supply limited. Prices are firm.

"The market figures on both Northern and Southern iron in the Central territory are stiff and buyers who have held off up to the present time have within the last few days covered for their requirements during the last half, feeling that they could not safely wait longer. This has kept the sales end in fair shape.

"Steel making and consuming lines are still very active and orders placed for structurals and rails continue large. The pipe works are out for the lower numbers of foundry and forge iron and have bought a good quantity. There is still an effort to obtain more.

"The outlook is encouraging. Consumption is improving, some lines that have been practically down and out up to the first of June are showing signs of activity, due to the railroads making long delayed purchases or signifying a desire to do so. It is estimated that the weekly productive capacity now active is in the neighborhood of 440,000 tons, which is at a yearly rate of production close to twenty-three million tons. This increase is very largely among furnaces making material exclusively for the steel works and is an indication of how consumption and activity have increased in this direction.

"In the South manufacturers are keeping stocks down and the output is being shipped out, with very little being piled. The Southern situation is strong and advances are momentarily expected. In general, inquiry seems to be improving as the first half of the year passes and inventories are completed.

"Coke is quiet, the main business being with furnaces contemplating starting up or the renewal of shipments on existing contracts. Foundry coke prices are strong at the existing figures and the better grades, as usual under such conditions, are in the best demand, some interests being sold up for the last half. Contracting is being indulged in freely for periods from six months to a year and at present prices are of advantage to buyers generally."

Matthew Addy & Co., Cincinnati, say in their weekly report:

"There is beginning to be an element of excitement in the pig iron market. The largest of the Southern furnace companies this week said that they had sold so much iron and they were so deluged with inquiries that they thought it time to quit. So they withdrew entirely. Within a week the market for Southern iron has jumped from $11.50 for No. 2 f. o. b. Birmingham, to $12.00 with a fair prospect of $12.50 in the immediate future. Northern iron has had a similar advance and there is a nervous feeling among the producers that the whole situation is changing so rapidly for the better and it would be the part of wisdom to rather shorten sail and await developments.

"An immense tonnage of cheap iron has been sold. Furnace order books are well filled and the future of the market is now up to the general business interests of the country. If there is a market for the finished forms of iron then the pig iron end of the situation will take care of itself and the market will see gradually ascending prices. It is very certain that consumption is steadily increasing and the prospects for a larger and larger melt of iron were never better.

"Inquiry is large and buying has been heavy. Not only this but consumers are asking to have shipments made at a faster rate. The absence of requests to hold shipments on contracts is a good sign."

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	14x20	$6 40
IX	14x20	7 45
IXX	14x20	8 60
IXXX	14x20	9 85
IXXXX	14x20	11 00
IC	20x28	13 70
IX	20x28	15 70
IXX	20x28	18 15
IXXX	20x28	20 55
IXXXX	20x28	22 95

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$ 8 50
Cokes, 200 lbs	IC	20x28	9 00
Cokes, 216 lbs	IC	20x28	9 50
Cokes, 270 lbs	IX	20x28	11 25

PIG IRON.

North'n Fdy., No. 1	$16 65@$17 15
North'n Fdy., No. 2	16 15@ 16 65
North'n Fdy., No. 3	15 65@ 16 15
Southern Fdy., No. 1	16 35@ 16 85
Southern Fdy., No. 2	15 85@ 16 35
Southern Fdy., No. 3	15 35@ 15 85
Southern Fdy., No. 4	14 85@ 15 35
Southern No. 1 Soft	16 35@ 16 85
Southern No. 2 Soft	15 85@ 16 35
Southern Gray Forge	13 85@ 14 35
Southern Mottled	13 60@ 14 10
Lake Sup. Charcoal	19 50@ 20 00
Southern Silveries, 4% Silicon	17 60@ 18 10
Southern Silveries, 5% Silicon	18 10@ 18 60
Southern Silveries, 6% Silicon	18 60@ 19 10
Jackson Co. Silveries, 6 per cent	19 90
Jackson Co. Silveries, 8 per cent	20 90
Jackson Co. Silveries, 10 per cent	21 90
Malleable Bessemer	16 40@ 16 85
Standard Bessemer	17 00@ 17 50
Alabama Basic	16 35@ 16 85

BLACK STEEL SHEETS.

No. 12	per 100 lbs.	$2 20@$2 30
No. 14	per 100 lbs.	2 25@ 2 35
No. 16	per 100 lbs.	2 35@ 2 45
Nos. 18-20	per 100 lbs.	2 60@ 2 65
Nos. 22-24	per 100 lbs.	2 65@ 2 70
No. 26	per 100 lbs.	2 70@ 2 75
No 27	per 100 lbs.	2 75@ 2 80
No 28	per 100 lbs.	2 85@ 2 95

GALVANIZED

No. 10	per 100 lbs.	$3 05@$3 10
Nos. 12-14	per 100 lbs.	3 05@ 3 10
No. 16	per 100 lbs.	3 05@ 3 10
Nos. 18-20	per 100 lbs.	3 15@ 3 25
Nos. 22-24	per 100 lbs.	3 30@ 3 35
No. 26	per 100 lbs.	3 50@ 3 55
No. 27	per 100 lbs.	3 70@ 3 75
No. 28	per 100 lbs.	3 90@ 4 00

POLISHED SHEET STEEL.

No. 24	per 100 lbs	$4 90
No. 26	per 100 lbs.	5 00
No. 27	per 100 lbs.	5 10
No. 28	per 100 lbs.	5 20

SMOOTH STEEL.

Wood's Smooth,	No. 20	$3 05
" "	No. 22-24	3 10
" "	No. 25-26	3 15
" "	No. 27	3 20
" "	No. 28	3 30

PATENT PLANISHED SHEET IRON.

Patent Planished Sheet Iron, ..."A" $10.20,"B" $9 20

PATENT PLANISHED SHEET STEEL.

Lackey Planished Sheet Steel.....8½c

SOLDER.

XXX Guaranteed ½ & ½	per lb. 18 c
Commercial ½ & ½	per lb. 17½c
No. 1 Plumbers	15½c

SHEET ZINC.

500 lb. Casks	case, per cwt.	$7 15
300 lb. Casks	per cwt.	7 15
Sheets	per cwt.	7 15

COPPER.

Copper sheet, 100 lbs. over, base...17c

TIN PIGS AND BARS.

Banca, pigs, per lb	29 c
Straights, pigs, per lb	29 c
Straights in bars, per lb	33 c

LEAD.

American Pig	4.37½@4.40
Bar	4.37½@4.40
National (White) brands (in less than 100 lb lots), per lb	8½c

Sheet.

Full coils	per 100 lbs.	$9 00
Cut coils	per 100 lbs.	9 50

HARDWARE.

ADZES.

Carpenters'.
Plumbs.....40%

Coopers'.
Barton's.....15%
White's.....15%

Railroad
Plumbs.....40%

Ship.
Plumbs.....40%
White's.....15%

AMMUNITION.

Caps, Percussion—per 1,000.

F. L Waterproof, 1-10s	40c
G D	35c
Musket	60c

Shells, Loaded—
Loaded with Black Powder....40%
Loaded with Smokeless Powder, medium grade.....40 & 5%
Loaded with Smokeless Powder, high grade.....40 & 10 & 10%

Union Metallic Cartridge Co.:
New Club, Black Powders.....40%
Nitro Club, Smokeless Powders, ...40 & 5%
Arrow, Smokeless Powders.... .....40 & 10 & 10%

Winchester:
Smokeless Repeater Grade..40 & 5%
Smokeless Leader Grade.40&10&10%
Black Powder.....40%

Gun Wads—per 1,000.
Winchester Gun Wads.....15%

Powder.

		Each.
DuPont's Sporting,	kegs	$5 50
" "	½ kegs	2 90
" "	¼ kegs	1 60
Dupont's Sm'k'less.	50-lb. drum	22 75
" "	25-lb. kegs	11 30
" "	12½-lb. kegs.	5 80
" "	6¼-lb. kegs.	2 97
"	1-lb. cans	52

Shot.

Drop shot, sizes smaller than B, 25-lb. bags, per bag	1 95
Drop shot, B and larger sizes, 25-lb bags, per bag	2 20
Buck Shot, 25-lb. bags, per bag	2 20
Chilled Shot, 25-lb. bags, "	2 20

ANCHORS

Expansion Screw Anchors 10%

ANVILS

Trenton, 70 to 80 lbs	9½c per lb
Trenton, 81 to 150 lbs	9½c per lb

ASBESTOS.

Board and Paper.....33⅓%

AUGURS.

Boring Machine	70%
Irwin's	40&10%
Carpenter's Nut	70%
Hollow.	
Bonney's—list $30.00	75&5%
Stearns, No. 3	36 00
Post Hole.	
Digwell, 8-inch	per doz. 12 50
Iwan's Post Hole and Well	40%
Vaughan's, 4 to 9-in., per doz.	6 60
Rafting.	
Snell's	50&5%
Ship.	
Ford's, with or wi'out screw	40-10%
Snell's " " "	40-5%

AWLS.

Brad.		
No. 3 Handled	per doz.	$0 40
No. 1050 Handled	"	90
Shouldered, assorted, 1 to 4,	per gro.	$1 20
Patent asst'd, 1 to 4	"	85
Harness.		
Common	"	95
Patent	"	90
Peg.		
Shouldered	"	1 50
Patent	"	60
Scratch.		
No 1 handled	"	4 80
No. IS, socket handled	per doz.	1 25
No. 7 Stanley		1 80
Sewing.		
Common	per gro.	90
Patent	"	90

AXES.

Boy's Handled.		
Lippincott, 3 lb	per doz.	$6 00
Marshall Falls City	"	5 50
Broad.		
Plumbs, West, Pat		33⅓%
" Can. Pat		35%
" Firemen's (handled)	per doz	$19 00
Plumbs, Miners' (handled)	"	9 00
Single Bitted (handled)		
Blood's Champion		$10 50
Blood's Dull Finished		9 00
Rough Rider		9 00
American		6 50
Perfect Premier, Forest Clipper		10 00
Duquesne		6 00
Single Bitted (without handles)		
Blood's Champion		$7 90
Blood's Dull Finish		8 00
Rough Rider		7 00
Electric Chopper		8 25
Duquesne		5 50
Crown		6 25
Double Bitted (without handles).		
Blood's Champion, 3½ to 4½ lbs. per doz		$10 00
Flint Edge	" "	9 75
Perfect Premier	" "	11 00

The above prices on axes of 3 to 4 lbs. are the base prices.
3½ to 4½ lbs advance 25c
4 to 5 lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$2.50	3.75	4.50	5.00

BALANCES, SPRING.

Frary's	40%
Pelouze	20%

BARS, CROW.

Pinch or Wedge Point..per cwt. $3 75

BASKETS.

Clothes.		
Small Willow	per doz.	$7 00
Medium "	"	8 75
Large "	"	10 50

Galvanized Iron.	½ bu.	1 bu.	1½ bu.
Per doz	$4 75	6 50	8 00

BEATERS.

		Per doz.
Carpet.		
No. 13 Tinned Spring Wire		$0 90
No. 11 Spring Wire coppered		1 20
No. 10 Preston		1 10
Egg.		Per doz.
No. 50 Imp. Dover		$0 75
No. 102 " " tinned		85
No. 150 " " hotel		1 50
No. 10 Heavy hotel tinned		2 10
No. 13 " " "		3 30
No. 15 " " "		3 60
No. 18 " " "		4 50

BELLOWS.

Blacksmiths'	65%
Hand.	
8-inch	per doz. $8 50
10-inch	" 10 50
Moulders'.	
12-inch	" 13 00

BELLS.

Call.	
3-inch Nickeled Rotary Bell, Bronzed base	per doz. $5 00
Cow.	
High Grade	60%
Kentucky	65&10%
Door.	Per doz.
New Departure Automatic	$6 00
Rotary.	
3 -in. Old Copper Bell	4 00
3 -in. Old Copper Bell, fancy	6 00
3 -in. Nickeled Steel Bell	4 50
3½-in. Nickeled Steel Bell	5 00
Hand.	
Hand Bells, polished	40&10%
White Metal	40%
Nickel Plated	30%
Swiss	40&33⅓%
Silver Chime	33⅓%
Miscellaneous.	
Church and School, steel alloy	50%

Farm, lbs	40	50	75	100
Each	$1.50	2.25	3.38	4.50

BEVELS, TEE

Stanley's, rosewood handle, new list	25%
Stanley's iron handle	25%

BINDING, OILCLOTH.

Zinc	80%
Brass	75%
Brass plated	75&5%

BITS.

Auger.		
Extra Double Spur		70&10%
Ford's Car and Machine		40&10%
Ford's Ship		40&10%
Irwin		50%
Russell Jenning's		25&10%
Clark's Expansive		60%
Steer's " Small list, $22.00		25%
" " Large " $26.00		25%
Irwin Car		50%
Ford's Ship Auger pattern Car		40&10%
Center		25%
Countersink.		
No. 18 Wheeler's	per doz.	$1 50
No. 20 "	"	2 25
American Snail head	"	1 00
" Rose "	"	1 00
" Flat	"	80
Mayhew's Flat	"	1 10
" Snail	"	1 25
Dowell		
Russell Jennings		25&10%
Gimlet.		
Standard Double Cut		60%
German Pattern	per doz.	$0 60
German	"	65
Gouge	"	80
Spoon	"	1 00
Countersink	"	1 20
Reamer.		
Jenning's Square	"	2 50
Standard Square	"	1 20
German Octagon	"	75
Screw Driver.		
No. 7 Common	"	50
No. 1 Triumph	"	1 25

BLACKING, STOVE. (See Polish).

BLADES, SAW

Butchers'.
Standard, ⅞ & 1⅛-in.....40%
Clock Spring.....40%
Star.....15%
Coil.....each, $1 50
Hack.
Disston's.....25&5%
Flexible.....33⅓&5%
Star.....20&5%
Wood.
Jackson's.....per doz. $2 25
Disston's—No. 6, 16, 26 & 045.. 4 25
Triumph..... 3 50
Forest Clipper..... 3 00

BLOCKS.

Snatch.
Wooden.....60&10%
Steel.....50%
Tackle.
Iron Strapped.....70&10%
Com. Steel.....60%

BOARDS. (New List)

Stove.....50&10%
Wash.
Globe, single.....per doz. $2 50
Globe, double..... " 3 35
Memphis Globe ..... " 2 75
Crystal Glass..... " 4 00
Brass King..... " 3 75
Nickel Plate..... " 4 15

BOBS, PLUMB.

Carpenters'.
No. 2, iron.....per doz. $0 65
No. 00, " ..... " 1 30
No. 0, " ..... " 2 20
No. 3, lead..... " 2 75
No. 4, " ..... " 3 40
No. 113, brass plated.. " 1 10
No. N30, nickel plat'd. " 1 30
No. N31, " " " 1 85

BOLTS.

Carriage, Machine, etc.
Carriage, ⅜x6 and sizes smaller and shorter.....70&10%
Carriage, sizes larger and longer than ⅜x6.....60&10%
Machine, ⅜x4 add sizes smaller and shorter.....70&10%
Machine, sizes larger and longer than ⅜x4.....60&5%
Elevator.....50-10&5%
Plow.....60&10%
Stove .....80&10%
Tire.....75%
Wagon Box Strap.....70%
Mortis, Door.
Gem, iron.....60%
Gem, bronze plated.....20%
Barrel.
Cast.....60%
Wrought.....75&10%
Wrought, bronzed.....60%
Flush.
Wrought.....50&10%
Spring.
Wrought .....75&10%
Wrought, heavy.....70&10%
Square.
Cast.....50&10%
Wrought.....75&10%

BORERS.

Angular.
Miller's Falls.....per dos. $13 00
Bung. Doz.
Enterprise Mfg. Co.'s No 1.....20%
" " " No 2... 20%

BOXES

Mail, No..... 1 2 10
Per dos.....$3.50 5.00 17.50
Miter.
New Langdon.....15&5%
Stanley's.....30%
Seavey's.....each, $1 50

BRACES.

Barber's ..... 50&10%
Fray's Genuine Spofford's.....60%
" Nos. 66 to 146.....50%
" No. 0108..... $3 50
" No. 08..... 2 75
" No. 010..... 3 00

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1, per doz. $9 00
" No. 2, " 9 00
Shelf.
Cast Iron, bronzed.....50-10&5%
Clover Wrought Steel.....70&10%
Clover Folding.....70%

BROILERS.

Wire.....70%
No. Crown, Self-basting, 80dos .. $2 50

BUCKETS.

Pump, Rubber.
Wychoff.....per gro. $4 75
Cooper..... " 4 75
Champion..... " 7 50
Victor..... " 9 25
Star ..... " 5 00
IXL..... " 6 75
Well.
Galv'd Qts..... 10 12 14
Per doz.....$2.90 $3.25 $3.40
Wooden, top ear, plain, per doz. 4 00
" " swivel, " 5 10

BUCKS, SAW.

Folding.....per doz. $2 10

BURRS, RIVETING.

Copper Burrs only.....20%
Tinners' Iron Burrs only.....65&5%

BUTTS.

Cast Iron.....70&5%
Wrought Brass (New List)....40&10%
Wrought Steel, Bright.....80&10%
Wrought Steel, Japanned.
Nos. 731 and - .....70&10&10%

CALIPERS.

Double..... .35%
Inside and Outside.....35%
Wing.....30%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M..... $3 75
Toe.
Shoenberger.....per lb 5 c
Bessemer..... " 4½c
American..... " 7 c
Swedes..... " 8½c

CANS.

Cheese Factory.
Ontario Pattern.
Gallons..... 20 30 40
Each..... $4.25 $5.00 $6.25
Milk.
Holstein.
Nos..... 300 301 302
Gals..... 5 8 10
Per doz.....$17.50 $22.00 $25.00
Gem Pattern.
Nos..... 400 401 402
Gals..... 5 8 10
Per doz.....$17.50 $21.50 $23.50
Omega Pattern.
Nos. ..... E. 2 E. 3
Gals..... 8 10
Per dozen..... $23.50 $26.50
Jersey Pattern.
Nos..... 80 81
Gals..... 8 10
Per doz..... $23.00 $27.00

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS.

Hay.
Diamond, Regular.....each, $3 85
Diamond, Sling..... " 6 50
Myers' Imperial ..... " 3 85
Myers' Clover Leaf..... " 4 00

CARTRIDGES.

See Ammunition.

CASTERS.

Standard—Ball Bearing.....50&10%
Bed.....60&5%
Common Plate.
Brass Wheel.....60&10%
Iron and porcelain wheels, new list.....60&5%
Philadelphia Plate, new list.....60%
Martin's.....60%
Payson's.....75&10%

CATCHERS, GRASS.

Carroll's, No. C.....per doz. $4 25
Wildermuth's,.
Nos..... 1 2 3
Per doz.....$5.60 $5.75 $6.25
Nos..... 4 5 6
Per doz.....$6.75 $9.50 $10.00

CHAIN AND CHAINS.

Breast Chains.
Doubleslack.....doz. pairs, $5 75
With Covert Snaps. " 5 00
With Slide..... " 3 25
Without Slide..... " 2 85
Bright Ox Chains.
⅝-in. $7.25; ½-in. $5.45 per 100 lbs.
Cable Coil Chain.
Inch..... 3/16 ¼ 5/16 ⅜
Per 100 lbs.$10.80 $8.00 $7.00 $6.20
Inch..... 7/16 ½ ⅝ ¾
Per 100 lbs.$6.00 $5.90 $5.75 $5.65
Inch..... ⅞ 1 1¼
Per 100 lbs.....$5.55 $5.55 $5.65
Cable Log Chain.
Advance 25c per 100 lb. on Cable Coil.
Cow Tie Chains.
American, 2 toggle.....50&5%
" toggle and snap...50&5%
" open and closed ring.....50&5%
Halter Chains.
American, new list.....33⅓%
German.....60%
Niagara, new list 40%
Brown's, " 40%
Picture Chains.
Light Brass, 3 ft.....per doz. $0 75
Heavy Brass, 3 ft .... " 1 30
Pump Chain
Galvanized, per 100 lbs.....$5 50
Safety Chain.
Brass.....60%
Special Steel Loading Chain.
Inch..... ½ 9/16 5/8
Per 100 lbs.....$16.00 $13.50 $12.50
Stretcher Chains.
7/16-in. $8.50; ½-in. $7.75 per 100 lbs.
Tie-Out Chains.
Brown's.....70&5%
Trace Chains.
Western Standard.
6½— 6-2.....per pair 30c
6½— 8-2..... " 34c
6½— 8-3..... " 38c
6½—10-2..... " 38c
7 — 8-2..... " 38c
7 —10-2..... " 42c
7 —10-1..... " 48c
7 —10-0..... " 60c
Add 2c per pair for Hooks.
Add 2c for Twist Link.
Wagon Stay Chains.
Inch..... ½ 9/16 ⅝
Per 100 lbs.....$6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue.....per gro. 75c
Red..... " 65c
White..... " 55c
Common White School Crayon..... " 10c

CHARCOAL.

In bags..... per bag 90c

CHECKS, DOOR.

Blount.....33⅓%
Sargent's.....33⅓%

CHIMNEY TOPS.

Iwan's Volcano.....50%

CHISELS.

Box.
Inches..... 10 12 14
Round per doz....$2.10 $2.25 $2.75
Flat " ... 2.85 3.60 4.20
Cold.
Good quality, ⅝ in. and larger.....per lb. .13c
Smaller size per doz.....
Socket, Framing and Firmer.
Clover.....75&10%
Tanged, Firmer.
With handles.....30&5%
Choppers, See *Cutters, Meat.*

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers.....per doz. $6 25
Yankee, for Yankee Screw Drivers..... 5 00

CHURNS.

Anti-Bent Wood,
Gal..... 5 7 10
Each.....$3.90 $4.60 $4.85
Belle, Barrel.....65&7½%
Common Dash, Gal. 4 5 6
Per doz..... $7.75 $8.50 $10.50
Union, Gal..... 5 7 10
Each.....$3.65 $3.90 $4.75

CLAMPS.

Adjustable.
Martin's.....30%
Carpenters'.
Steel Bar.....25%
Hose.
Sherman's, brass, ⅝-in., per doz.. 42c
Double brass, ⅝-in., " 90c
Saw Filers.
Disston's list, $30.00.....30%
Stearns', No. 0, $3.50; No. 1, $11.50; No. 3, $5.00 doz.
Wentworth's, No. 1, $6.00; No. 3 $8.10.

CLAWS, TACK.

Cast, wood hdle.....per doz.45@60c
Forged steel, wood hdle " $0.80
Solid steel..... " 1 00
Giant..... " 50

CLEANERS.

Drain.
Iwan's Adjustable.....55%
Iwan's Stationary.....40&5%
Pot.
Wire.....per doz. $0 75
Side-Walk.
Steel.....per doz. $3 25
XLCR .....65&5%

CLEAVERS

Family.
Griffin, Inch..... 6 7 8
Per doz.....$5.50 $5.75 $6.25
Royal.....per doz. 2 25
Butchers.
Plumbs.....25%

CLEVISES

Malleable.....5½c lb.

CLIPPERS.

Bolt.....$1.90@4.75

CLIPS.

Axle.....65&5%
Damper.
Standard.....per doz. 65c
Troy..... " 38c
Hame..... " 17

CLOTH

Emery.
Star.....50%
B. & A.....50%
Hardware Wire—full rolls (100 ft.)
2 to 3 incl., Galv.—in full roll... 2 75
4 and 5..... " .. 3 00
6..... " .. 3 25
7 and 8..... " .. 3 75
Screen Wire.
12 mesh, painted, per 100 sq. ft.. 1 35

COCKS AND FAUCETS.

Compression Plain Bibbs...60, 10&5%
Lever Bibb Cocks.....60, 10&5%
Compression Hose Bibbs ..50—10&5%
Telegraph Faucets (new list)..50—5%
Racking Cocks (new list)...60, 10&5%
Compression Lock C'ks(new list).70%
Andrew's Brass Faucets.....70%
Angle Plug Faucets, per doz....$0 85
Milk Can Faucets, per doz..$2.60-4.20
Petroleum Faucets .....75&5%

COLLARS, STOVE PIPE.

Inches..... 5 6 7
Plain Tin..per gro.$1.90 $2.40 $3.50
Japanned Tin " 3.00 3.00 4.25
Lacquered Brass" 3.00 5.50 4.25

COMBS, CURRY.

Nos... 000 11 15 39 89 108
Per
Doz..$.37 .60 1.90 .90 1.15 .80
Nos... 200 320 390 532 620 1400
Per
Doz $1.05 .85 1.35 1.20 .75 1.40

COMPASSES.

Carpenters'.....60%
Pencil—Faber's.....per doz. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 lb.....per lb 30c
1½ lb.....31c 2 lb... " 29c
3 lb and larger..... " 26c

CORD.

Picture
White Wire (new list) .....85&10%
Sash.
Monarch Braided Flax...per lb
Silver Lake, white, 7-32 in. "
Silver Lake, white, 8-32 in. "
Keystone.....8-32 in. " 29c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular.....40&10%
Williamson's Forged Worm.....50%

COTTERS, SPRING.

All sizes—new list.....90&30%

COUPLINGS, HOSE.

Brass.....per doz. $1 60
Brass Plated..... " 85

COVERS, WAGON—See Tents.

CRADLES, GRAIN.

Morgan's Grapevine....per doz.$22 75

CRAYONS—See Chalk.

CROW BARS.

Inch or Wedge Point.....per lb 3¼c

CUTTERS.

Glass.
Red Devil.....45%
Smith & Hemenway Co.....50%
Woodward.....40%
Meat.
Enterprise, Nos. 5, 10, 12, 22, 32 and 42.....25%
No. 202, list, $1.50 ea.....40&7½%
Pipe.
Stanwoods. No.... 1 2 3
Each.....$0.85 $1.50 $4.0
Slaw and Crout.
3-knife Crout.....per doz. $9 7
1-knife Slaw..... " 1 6
2-knife Slaw..... " 2 2
Washer..... " 7 7

DAMPERS, STOVE PIPE.

Jewel.....50&10%
American..... 50%

DIES AND STOCKS.

Discount.....40%
King's, Little Giant.....33⅓%

DIGGERS.

Post Hole.
Acme.....per doz. $9 25
Atlas..... " 9 00
Eureka..... " 7 50
Hercules..... " 10 25
Iwan's Split Handle.. " 7 50
Iwan's Perfection.... " 9 00
Iwan's Hercules pattern " 10 00
Ryan's..... " 17 00
See also Augers—Post Hole.
Dividers, Wing.....65&10%

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel, painted...per doz. $7 93
1⅛ in. 4-panel, painted... " 9 50
1⅛ in. 3-panel, natural pine, fancy..... " 12 40

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock.....60&10%
Blacksmith's Twist.....60%
Breast.
Fray's No. 9.....each, $1 75
Millers Falls No. 12..... " 2 10
Hand.
Goodell's Automatic.
Nos..... 01 03 3 20
Per doz.. $7.75 $12 50 $12.50 $11.00
Goodell's Single Gear. per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25
Reciprocating.
Goodell's.....per doz. 16 50
Bit Stock.
Standard List..60&5%@60%@10

DRIVERS, SCREW.

Standard.....65&10%
Lock Ferrule.....60%
Champion.....40&10%
Champion Pattern.....70%
Clark's Interchangeable.....30%
Edison.....60%
Reed's Lightning.....45&5%
Goodell's Spiral.....50, 10, 5&2½%
Yankee Ratchet 50%
" " Spiral.....50&10%
Smith & Hemenway Co.....40&5%

EAVES TROUGH, GALVANIZED.

Terms, 2% for cash. Factory shipments generally delivered.

See also conductor pipe and elbows.

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches..... 5 6 7
Smooth, per doz...$0.75 $0.85 $1.20
Plan'd, " 1.80 2.00 2.65
Corrugated Conductor.
Discount.....75&10%
Corrugated Stove.
Inches..... 5 6 7
Smooth, per doz..$0.85 $1.00 $1.50
Pol'd, " .. 1.40 1.65 2.25
Plan'd, " .. 2.15 2.65 3.40
Four-Piece Stove.
Inches..... 5 6 7
Smooth, per doz..$0.60 $0.65 $0.95
Planished. " .. 1.40 1.70 2.30

EMERY CLOTH—See Cloth.

EMERY TURKISH.

Size .....5-lb. pkgs. ½ kegs. kegs.
No 00 to 150, per lb.. 6c 4c 4c
Flour..... " ... 5c 3c 3c

ENAMEL, IRON.

A-B Iron Enamel, 3 doz. case, ...per gro., 15 00
Peerless..... 1 25

EXTRACTORS, PIG.

See Forceps, Pig

EYES.

Bright Wire Screw—See Goods, B. W.
Drifting Pick.....60, 10&5%
Hooks and—
Brass.....50&10%
Iron.....70%

FASTENERS, STORM SASH.

Schroeder's.....per doz. $0.85
Sensible..... " 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Delta.....70&10%

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior.....per doz. $4 7
Whisson's Imp..... " 5 25

FORKS.

Barley.
Steel New List.....65&10%
Wood, 4-tines, per doz.....$5 0
Coal, Coke, Cottonseed.....30%
Hay.
2-tine.....60%
3 " .....60&5%
4 " .....60&10%
Digging.....65&5%
Scoop.....30%
Leader.
3-tine.....60&5%
4 " .....60&5%
Manure.
4-tine 60%
Ore.....40%
Spading.

FRAMES.

Hack Saw.
Union.....per doz. $5 75
Jenning's adj..... " 7 50
Cast..... " 2 50

FREEZERS, ICE CREAM.

Arctic.
Qts..... 1 2 3 4 6
Each...$1.10 1.30 1.50 1.80 2.30
Qts..... 8 10 12 15
Each.....$2.95 3.80 4.50 5.20
Jack Frost.
Qts..... 2 3 4 6 8 10
Price .$1.60 1.90 2.20 2.80 3.60 4.55

GAUGES.

Butt and Rabbet.
Cream Pail.
Fairmont.....per doz. $3 75
Marking, Mortise, etc.....
.....50&10%
Saw.
Wire.
Disston's.....25%

GIMLETS.

Discount.....35@40%

GLASS, WINDOW.

Single.....90&20%
Double.....90&25%

GLASSES, LEVEL.

GLUE.

Bulk.
B Amber.....per lb. 12
A White..... " 15
H. S. Amber..... " 16½c
Liquid.
Army & Navy.....40%
Le Page's—
List "A".....37½%
List "B".....33⅓%
List "C".....25%

GOODS.

Bright Wire.....90%

GREASE, AXLE.

Wood Boxes.
Diamond.....per gro. $5 50
Frazer's..... 9 50
Hub Lightning..... 5 25
Paragon..... 6 75
Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each.
Hub Lightning, 15 lb. 55c; 25 lb 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross.....$9 50
3 lb. per gross.....25 00
5 lb. per gross.....37 00

GRIDDLES.

Soapstone.....33⅓%

GRINDSTONES.

Family.
Inches..... 6 8 10
Per doz.....$7.25 9.75 12.00
Loose.
Per ton.....$20 00@$21 00
Mounted.
Ball Bearing..... 1 2 3
Each.....$3.15 3.00 2.85
Common Bearing 1 2 3
Each.....$3.00 2.80 2.65

GUN WADS
(See Ammunition.)

HAFTS, AWL.

Brad.
Common.....per doz. $0 19
Peg.
Common..... " 22
Patent, plain top..... " 47
Patent, leather top... " 52
Sewing.
Common..... " 22
Patent..... " 52

HALTERS.

Jute Rope.....per doz. $1 10
Sisal Rope..... " 1 85
Web..... " 2 00
Leather, rope tie..... " 8 50
Leather, leather tie..... " 11 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Plumbs.....60&5%
Engineers'.
Plumbs.....60&5%
Farriers'.
Plumbs.....40&10%
Machinists'.
Plumbs.....60&5%
Nail.
Plumbs.....40&7½%
Quaker City.....per doz. $3 50
Cast..... " 1 15
Maydole's.....30&5%
Riveting.
Plumbs.....40&12½%
Shoe.
Cast.....per doz. $0 90
Tack.
All Iron.....per doz. $0 35
Pol'd Iron, Hickory hdl. " 50
Mall. Iron, Inlaid..... " 1 55
Magnetic..... 1 2 3
Per doz.....$0.70 .80 1.00
Magazine.. .....per doz. 4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs .....80&5%
5 lbs. and over.....80&10%
Masons'.
Single and Double Face.....80&5%

HANDLES.

Auger.
Common Assorted....per doz. $0 50
Pratt's Adjustable, Nos. 1 & 2, per doz..... 4 50
Ives' Adjustable.....per set, 1 35
Axe.....40%
Chisel.
Hickory, Tanged Firmer, Assorted, 33c; Large, 38c per doz.
Hickory, Socket Firmer, Assorted, 27c; Large, 30c per doz.
Applewood, Tanged, Firmer, Assorted, 29c; Large, 38c per doz.
Applewood, Socket, Firmer, Assorted .....per doz $0 24
Coal Pick.....40%
Drifting Pick.....40%
File, assorted, 13c; Large, 16c per doz.
Hammer.
Adze Eye.....per doz. $0.40
Blacksmiths'..... " 40c@70c
Machinists'..... " 45c@70c
Hatchet..... " 40
Hay and Manure Fork.....30%
Hoe and Rake.....30%
Plain.....per doz. $0 75
Varnished..... " 80
Screw Driver.
Assorted..... " 37
Large..... " 48
Shovel and Spade.....33⅓%

HANGERS.

Barn Door.
U. S. Rolled Bearing.....60&10%
Matchless.....50&10%
Storm King.....60%
World's Best.....50%
Wagner's Adjustable.....70&10%
Warehouse Big Twin.....25%
Conductor P.
Griffin.....70&10%
Iwan's Perfection.....50%
Eave Trough.
Baker's.....per gro. $2 35
Imperial.....20%
Wire.....33⅓%
Parlor Door.
Acme.....per set, $3 75
Ives' Improved..... " 2 60
Lane's Standard..... " 3 50
Lane's New Model.... " 3 10
Le Roy Noiseless..... " 4 00
Richards'.....40-10&5%

HASPS.

Hinge, Wrought.....40%
With Staples—See Staples.

HATCHETS.

Crescent.....50&10%
Cast Claw.....per doz. $1 10@1 35
Cast Shingling.... " 1 25
Gefmantown.....30%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wenzleman's No. 1.....per doz. $9 00
Wenzleman's No. 2..... " 9 00

HINGES.

Blind.
Clark's Gravity ... per doz. sets, 95c
Parker's.....65%
Shepherd's Noiseless, for Wood Casing.....per doz $1 05
Gate.
Clark's..... 1 2 3
Hgs & Ltch. . doz. $2.50 3.25 4.25
Hinges only... " 2.00 2.50
Latches only . " .90 .90
Knuckle.....per doz prs. $6 00
Leed's..... " sets 6 75
Superior..... " prs. 9 50
Spring.
Banner.....50%
Chicago.....25&5%
Columbia Dbl. Acting....40&10&5%
Gem.....25%
Ideal Detachable.....per gro. $11
Matchless.....40%
New Idea.....per gro. $8 00
Oxford.....20%
Wrought Iron.
New Lists .....
Light Strap Hinges.....60%
Heavy Strap Hinges.....60, 10&10%
Light T Hinges.....55%
Heavy T Hinges.....45%
Extra Heavy T Hinges.....60%
Screw Hook and Strap.
6 to 12 in.....per 100 lbs. $4 50
14 to 20 in..... " " 4 25
22 to 36 in..... " " 4 00
Screw Hook and Eye.
⅝ in.....per 100 lbs. $6 75
⅞ in..... " " 7 75
⅞ in..... " " 9 75

HOES.

Garden .....70&10%
Grub.
Extra.....70%
Hazel.....per doz. $5 00
Ladies' and Boys'.....75%
Mortar.....75&10%
Planter's Eye.....62½%
Weed.....75&15%

HOLLOW WARE—See Ware.

HOOKS.

And Eyes.
Brass.....60%
Iron.....70%
Awning.....per gro. 80&10%
Belt.
Brown's.....70&5%
Jones'.....65&5%
Bench.
See Stops, Bench.

Box.
Inch..... 5 7 10 12
Per doz.....$1.90 2.10 2.25 2.65
Humason & Beckley's..per doz. $2 50
(See Goods, Bright Wire.)
Bush.
Common Axe Handle.per doz. $7 00
Chain.
Inch..... ¼&5/16 ⅜ 7/16 ½
Per 100...$7.60-8.10 9.75 11.50 12.60
Clothes Lines.
Japanned .....per doz 22c@24c
Galvanized..... " 40c
Coat and Hat
Cast Iron .... per gro. 72c@$1 50
Gem Wire.....70%
Conductor.
Malleable.....25%
Wrought.....20%
Corn.
Common, rivetted, painted red.....per doz. $2 25
Little Giant..... " 3 25
Gate.
See Goods, Bright Wire.
Grass.
Common. Nos..... 2 3 1
Per doz.....$1.50 1.60 1.70
German.....per doz. 1 75
Gypsy..... " 2 50
Hammock.
With plate.....per doz. 50
With screw..... " 45
Lambrequin, or Drapery, per gro. .21c
Picture.....50%@50&10%
Potato and Manure.....70&12½%
Screw.
Brass.....80&5%
(See Goods, Bright Wire.)
Seat Spring.....per lb. 5½c

HOOPS, TUB.

Elastic ... per case of 2 doz.... $1 50

HOSE, GARDEN.

	Coupled, per ft.
Velvet, 3 ply-¾" guar. press.....	7½c
Eclipse, " " "	8½c
Diamond " " "	10
Jeanette " " "	13
Pennsylv'a " " "	16

COTTON COV. RUBBER HOSE.

High Grade-¾"-guar. press.	400 lbs.	11½
Special " " "	300 "	9½c
Leader " " "	100 "	7½c

HUSKERS.

Boss.
Nos..... B BB E 200
Per doz.....$2.00 2.00 1.75 .80
Nos..... L PP P K
Per gro.....$5.40 6.00 6.00 10.50
Nos..... 2000 3000 O
Per gro.....$3.50 9.00 24.50
Nos..... 60 59 64 68
Per doz.....$2.15 2.15 .85 1.45
Brinkerhoff's.
Per gro.....$14 40

IRON.

See Metals.—First column.

IRONS.

Curling.
C.....per doz. $0 40
B..... " 50
A..... " 58
Princess..... " 70
Thelma..... " 1 25
Pinking..... " 70
Plane.
Wood Bench.....20&5%
Sad.
Charcoal.....per doz.$11 00
Common, polished, per 100 lb. 3 75
No. 70 Asbestos.....$1 20 net
No. 100 " ..... 1 30 net
Common, nickel plated, 5 25
Chinese Polishing.....per doz. 7 40
Laundry, No. 1..... " 5 75
Laundry, No. 2..... " 6 25
Mrs. Pott's
No. 50 J, Enterprise, per set 93
No. 55 J, " " 90
No. 50 T, " " 1 00
No. 55 T, " " 96
Tailors' Sad.....per lb. 5½
Tailors' Geese..... " 5½
Tuyere.
Single Duck Nest.....per doz $5 25
Double Duck Nest .. " 6 25
Sutton.....each.... 2 60

JACKS.

Locomotive.....70%
Wagon.
Miller 50%
Oliver,
Nos..... 0 00
Each.....$0.60 $0.80

Standard.
Nos..... 1 2
Each.....$0.60 1.00
Wilcox.
Nos..... 1 2 3
Each..... $0.85 1.20 2.90

KETTLES.

Brass.....15%
Cauldron.....40&5%
Copper..... per lb., 27c
Maslin.....65%
Sugar.....50%

KNIVES.

Beet Topping.
Clyde, 9-in. Scimiter Blade, doz.$3 85
California..... 3 40
Cooper's Hoop.....15%
Corn.
Clipper.....per doz. $1 75
Disston's..... " 2 75
Earle's..... " 3 00
Woodford..... " 2 25
Drawing.
Standard.....70%
Adjustable.....15%
Barton's Carpenters'.....10%
Folding Handle.....25&5%
Hay.
American, Sickle Edge...doz. $10 50
Canton, Sickle Edge..... " 8 25
Heath's..... " 8 00
Iwan's, Sickle Edge..... " 9 50
Iwan's, Impv'd Serrated . " 10 00
Lightn'g, Holt's Genuine. " 6 50
Lightning Pattern..... " 6 00
Wadsworth's Sp'r Poin'.. " 8 50
Hedge.
Challenge.....per doz. $6 00
Disston's..... " 3 75
Mincing.
Common, Single..... " 40
Common, Double..... " 50
Streeter, 4-Blade..... " 1 30
Streeter, 6-Blade..... " 2 00
Putty.
Common.....per doz. $0 60@1 00
Lander'r..... " 1 40@1 75
Scraping.
Beech Handle..... 75@1 00
Lander's..... 5 25@6 00

KNOBS.

Door.
Mineral.....per doz. $0 80
Porcelain..... " 90
Jet..... " 90

LADDERS.

Common Long.
Per ft.....9c@14c
Extension.
Per ft.....14c
Step.
Common, per ft.....7½c
Common, with Shelf, add 10c.
Keystone.....15c
Triumph, per ft.....20c

LANTERNS.

Bull's Eye Police.
3 -in. Flash Light....per doz. $6 00
2¾-in. Regular..... " 4 90
3 -in. Regular..... " 5 50
Tubular.
Dietz & Hanes' . . ..net prices.

LEADERS, CATTLE.

Nos..... 1 2 3
Per doz..... $0 55 .70 2.75

LEATHER, LACE.

Cut.....33⅓%
Sides.
Ex. Quality ..... per sq. ft., 27

LEATHERS, PUMP.

Valve and Plunger.....10%

LIFTERS.

Stove Cover.
Coppered.....per gro. 1 75@3 65
Ideal..... " 5 50
Alaska, Coppered " 4 00
Alaska, Nickeled. " 5 00
Transom.
Payson's.....80%

LINES.

Chalk.
Twisted in 20-ft. hanks.
Nos.... 4 6 7 8 9
Gross...$1.50 2 00 2 25 2 50 3 00
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz..... 25c 30c 35c 41c
Braided in 20-ft. hanks.
Nos..... 0 1 2 3
Per doz..... 22c 25c 31c 35c
Mansons', in 100-ft. hanks...doz. 80c
Clothes.
60-ft. Jute.....per doz. $0 95
72-ft. Jute..... " 1 15
60-ft. Sisal..... " 1 40
72-ft. Sisal..... " 2 15
50-ft. Cotton..... " 1 15
50-ft. Braided Cotton. " 25

LINING, STOVE.

In Bricks .....per crate. 42c

MACHINES.

Boring.	Without Augers	With Augers
Angular.....per doz.	3 00	4 40
Upright..... "	2 60	4 00
Leather Riveting.		
Chicago, Pomeroy....per doz.	$9 00	
Excelsior..... "	2 00	
Handy..... "	2 00	
Little Giant..... "	3 00	
Pony, Pomeroy..... "	7 20	
Washing.		
Winner.....per doz.	54 00	
Keystone..... "	54 00	
U. S. Steel..... "	60 00	
Advance, f.o.b.Chicago "	24 50	

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.
Fibre Head, Small....per doz. $5 00
" " Medium. " 5 75
" " Large... " 7 00
Round Hickory..... " 2 25
" Lignumvitæ... " 4 00
Square Hickory..... " 2 25
" Lignumvitæ... " 4 50
Tinners'.
Applewood..... " 1 70
Hickory..... " 1.00@1 50
Hickory Sheet Iron... " 1 50

MATS.

Door
National Rigid.....50, 10&5%
Acme Steel Flexible.....33⅓%
Stove.
No. 2.....per gro. $3 25
No. 1..... " 3 50
No. 1 Asbestos Toasters, or wire-covered Stove Mats, with handle.....per doz. 1 10
No. 2 Asbestos Toasters, with ring.....per doz. 60

MATTOCKS.

Plumbs.....65&10%
Extra.....60%

MAULS.

Iron, lbs.....	10	13	16	18
Per doz....	$4.00	4.50	5.25	5.60
Wood face, lbs.....	10	12	14	
Per doz.....	$5.00	5.50	6.00	

Wood Choppers'.
Lake Super'r & Oregon Pat. 75&10%

MEASURES.

	¼ pk.	1 pk.	bu.
Galvanized, per doz.	$2.25	3.00	3.85
Japanned.. "	1.75	2.45	3.15

MICA.

First Quality.....40&5%
Second Quality.....50&5%

MILLS, COFFEE.

Enterprise.....25%
Parker.....50&5%
Arcade.....40-12½&2½%

MITRE BOXES.

See Boxes.

MOPS.

Erie.....per doz. $3 15
Handled Cotton.

Pounds.....	¾	1	1½	2
Per dozen....	$2.00	2.35	2.65	3.25

MOWERS, LAWN.

Gladiator—B. B.			
Inches.....	16	18	20
Each.....	6.50	7.25	8.00
King Universal—B. B.			
Each.....	5.25	5.75	6.00
Inches.....	14	16	18
Big Giant.....	3.50	3.90	4.25
Little Giant.....	2.50	2.65	2.75

NAILS.

Cut Steel .....rates, $2 50
Cut Iron..... 2 60
Wire.
Small Lots..... $2 20
Carload Lots..... 2 15
Cement Coated..... 2 30
Horse Shoe.
Ausable.....55&5%
Capewell.....15%
Perfect.....55&5%
Putnam.....20&5%
Star.....35&5%
Clover Leaf .....per lb., net, 10½c
Picture.
Brass Heads.....25%
Brads.....85%
Furniture.....15%

NAIL PULLERS.

See Pullers.

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized beforeweaving .80,10&2½%
Galvanized after weaving.....80&7½%
Cut Pieces.....65&5%

NIPPERS.

End Cutting.
Stubb's Pattern. Inches 5½ 6
Per dozen..... $4.00 4.25
End and Diagonal Cutting.
Swedish Side.....75%
Utica Drop Forge & Tool Co....60%
Hoof.
Heller's.....40&10%
V. & B.....55&5%

NOZZLES.

Hose.
Genuine Gem.....per doz. $3 90
Magic..... " 3 60
Mystic..... " 3 00

NUTS, HOT PRESSED.

Square Blank.

In	½	9/16	⅝	11/16	¾	⅞	1
lb	9½c	8c	6½c	5½c	5½c	5c	4½c

Square Tapped.

In.	½	9/16	⅝	11/16	¾	⅞	1
lb.	12½c	10½c	8c	7½c	6½c	6½c	6c

For 5-lb. boxes add ½c per lb. to above prices.

OILERS.

Chase Pattern.
Brass and Copper.....60%
Zinc.....60%
Engineers'.
Cannon.....55%
Tin .....per doz. $2 00@$2 25
Machine.
Common.....per doz. $0 58
Copper Plated Steel... " 1 00
Malleable Iron.....60, 10&5%
Japanned.....05@75.

OPENERS.

Box.

Inches.....	10	12	14
Flat.....per doz.	$2.85	3.60	4.15
Round.... "	2.10	2.25	2.75

Can.
Delmonico .....per doz $1 30
Never Slip..... " 65
Crate.
V. & B..... " 5 75

OUTFITS, COBBLING.

Combination.....per doz. 11 00
Economy..... " 4 65
Family..... " 9 75

PADLOCKS.

Standard Wrought.....75&5%
Champion.....50%
Eureka.....40, 10&5%
Yale.....60&5%

PAILS.

Cream.
14-qt , without gauge, per doz. $2 50
20-qt., " " " " 3 00
20-qt., with gauge.... " 3 50
Sap.
10-qt., Galvanized, per 100....$13 00
12-qt., " " 14 50
14-qt., " " 16 25
16-qt., " " 17 75
10-qt.,IC Tin..... " 10 25
12-qt., " .... " 11 75
14-qt., " .... " 13 00
10-qt.,IX Tin.... " 12 75
12-qt., " .... " 16 00
14-qt., " .... " 17 00
Stock.

Galv'd, qts.	14	16	18	20
Per doz.....	$3.75	4.00	4.75	5.25

Water.

Galvanized... qts.	10	12	14
Per doz.....	$1.95	2.20	2.45

Wood.
Cable, 2-Hoop.....per doz. $1 70
Cable, 3-Hoop..... " 1 90
Cedar, 3-Hoop..... " 2 85
Standard, 2-Hoop.... " 1 60
Standard, 3-Hoop.... " 1 80

PANS

Dripping.....60&5%
Fry
Common .....75&10%
Acme 70%
Roasting.
Paxton,

Nos.....	1	2	3	4
Per doz....	$4.75	5.75	6.50	7.50
Neverburn ..	4.00	4.50	5.50	6.00

Savory, No. 200.....per doz. $8.00

PAPER.

Building.
Plain.....per 100 lbs. $1 25
Tarred..... " 1 35
Tarred Felt..... " 1 65
No. 20, Red Rosin....per roll, 40
No. 30, Red Rosin.... " 55
Sand and Emery.
Star ..... low list, 50%
B. & A.....50%
Wrapping.
Drab Fiber.....per lb. $0 00
Rag..... " 0 00

PARERS.

Apple.
Bay State.....per doz. $13 00
Turntable..... " 0 00
White Mountain..... " 5 00
Reading..... " 7 00
Potato.
Goodsell's Saratoga, 10½ in., doz. 6 50
Goodsell's Saratoga, 5 in., doz. 5 50

PICKS.

Adze Eye Ore.....70%
Drifting and Poll Picks.....70%
Plumbs, Railroad.....70%
Surface.....70%

PINCERS.

Carpenters', cast steel.

Inches	6	8	10	12
Per doz	$2.00	2.60	2.95	3.75

Blacksmiths'.....45%
Heller's.....40%

PINS.

Clothes.
Common.....per box of 5 gro $0 52
Hoyt's..... " " 31
U. S..... " " 70
Picket.
Fluted, 15-in.....per doz. $0 70
Fluted, 21-in..... ... " 1 60
Spiral..... " 1 90

PIPE.

Conductor.

	Gal. Steel	Charcoal
L. C. L. to Dealers:—		
Eastern	70&10%	50&10&2½%
Pittsburgh	75&10&5%	60%
Central	75&10%	60%
Northwestern	75&7½%	60%
Western	70&12½%	50&12½%
Tennessee	70&10%	50&12½%
Southern	70%	50&12½%
Southwestern	70%	50&5%

Terms 60 days; 2% Cash 10 days.
Factory shipments generally delivered.

Lead.
Full coils .....per lb. 7¼c
Cut coils..... " 7¾c
Stove

Acme—Inches	5	6	7
Smooth, per jt.	8¼c	9¼c	10¼c
Planished, "	32 c	33 c	43 c
Peerless—Smooth,	7¾c	8 c	9¾c
Polished	14¼c	15¼c	18 c
Planished	28 c	31 c	35¼c
Made-up—Inches	5	6	7
Smooth	7¾c	8 c	9¾c

7 to 6 in. Smooth Tapers, pr jt...13c
6 in. Smooth T's..... " 27c
7 to 6 in. Planished Tapers.....45c

Yale Patent Lock Pipe—Stove.

	5"	6"	7"	7" to 6"
	Cents			
Battle Axe Blue	7	7½	9½	10½
Can't Slip "	7½	8½	10	11
Peerless "	7½	8½	10	11
Duplex "	10	11	13	14
Yale, Rus. Fin	15	16	17	18
Duplex Planished	29	31	37	38
Galvanp, Gal	15	16	17	18

If wanted made up, add per joint or grooved, 1c; riveted, 1½c. Grating made-up pipe extra.

Wrought Iron Gas Pipe.
⅛@¼-in., black.....discount, 60%
⅛@¼-in., black..... " 60,10&5%
⅜-in. to 6-in, black... " 70%
7-in. to 12-in., black... " 62½%
⅛@¼-in., galvanized.... " 42%
⅛@¼-in., galvanized.... " 50%
⅜-in. to 6-in., galvan'd " 57½%
7-in. to 12-in., galvan'd " 45%

PLANES.

Sargent Iron Bench.....60%
Stanley Iron Bench .....25&5%

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Giant, Button's—80% off list.
Cutting
Bernard's.....30%
Lodi.....50%
Upper End and Diagonal Cutting
Swedish Side.....70%
Utica Drop Forge & Tool Co....60%
Fencing.
Black Bull.....per doz. $8 25
Farmers' Choice.....per doz. $8 00
Russell's..... " 8 25
Flat and Round Nose.
Bernard's.....30%
German.....65%
Lodi.....50%
Paragon.....50%

Gas.—Inches	7	8	10	12
Per doz	23.00	3.50	4.50	5.50

Tinners'.
Hollow.....40%
Solid.....each, 5½c

PLUMBS AND LEVELS

Common .....60&10&10%
Cook's.....40%
Davis' Iron.....25%
Davis' Inclinometer.....15%

POINTS

Drive Well Points.....75&5%

POKERS, STOVE.

Wr't Steel, str't or bent, per doz. $0 55
Wr't Steel, wood hand'ls " 80
Nickel Plated, coil hand'ls " 65

POKES, ANIMAL.

Cracker Jack, wr't steel, per doz. $4 50

POLISH.

Metal.
White Silk, half pints, per doz, $2 00
White Silk, 6-oz. cans, per doz. 1 00
Shoe.
M. C. D.....per doz.....36c@50c
F. C. O..... " 40c
T M..... " .55c@$1 75
Imperial.....per gro 5 00
Stove.
Black Eagle, 1-lb. cans, pr. gr. $15 00
Black Silk—
5-lb. pail..... $0 70
Paste, 5-oz. cans....per doz. 75
Paste, ½-lb. cans.... " 1 05
Liquid, ½-pt. cans... " 1 05
Liquid, 6-oz. cans... " 75
Black Jack, ½-lb. cans. " 9 25
Dixon's Carb. of Iron. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1-qt. per doz. $1 05
Square, 1½-qt..... " 1 15
Square, 2-qt..... " 1 35
4-qt..... " 3 75

POTS, FIRE.

Clayton & Lambert's, each, $4 75@6 25
Gate City.....each, 6 25
Gem.....each, $6 75@8 50

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co.....25%

PRIMERS

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $6 50
Henry's Improved..... " 75&10%
Water's Improved..... " 80%

PULLERS.

Cork.
Daisy.....each, $3 10
Phœnix..... " 1 40
Quick and Easy..... " 2 70
Nail.
Giant.....per doz. 10 50
Giant Pattern..... " 6 00
Jumbo..... " 9 00
Tack—Giant ..... " 40

PULLEYS.

Awning—Jap'd.....60%
Clothes Line.....50&10%
Hay Fork.
Iron Wheel, 5-in.....per doz. $1 75
Wood Wheel, 6-in.... " 1 75
Wood Wheel, 6-in., pass knot, ...per doz. 2 15
Hot House—Jap'd.....50&10%
Screw—Jap'd.....60%
Side—Jap'd.....50&10%
Sash.
Common.....per doz. $0 16
Common-Sense, 2-in.. " 20
Empire Pattern, 2-in.. " 20
Ideal..... " 20
Steel..... " 25

PUMPS.

Pitcher Spout.

Nos	1	2	3	4
Each	$1.00	1.15	1.30	1.70

Spray.
Blizzard.....per doz. $14 50
Cyclone, tin..... " 3 40
Cyclone, copper..... " 6 75
Daisy..... " 9 00
Little Giant.....each,... 2 25

PUNCHES.

Conductors'.
No 22.....per doz $2 2
Machine.....per lb 19
Saddlers'.
Common ... .per doz 60c@70c
Good..... " 72c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 lbs. 2 25

RAIL.

Barn Door.
Matchless, 1-in..... 3 c
Matchless, 1½-in..... 3½c
Storm King..... 4 c
Sliding Door.
Painted steel.....per ft. 4½c
Bronzed wrought iron...per ft. 8½c

RAKES.

Coal or Wood.....per doz. $5 20
Garden.
Steel.....70%
Steel, bow.....70%
Malleable iron, heavy.....60&10%
Hay.
Wood.....$1 50@$2 00
Lawn—Wood.
XXX.....per doz. $3 00
Automatic..... " 5 25
Lawn Queen..... " 2 75
Jumbo, 36 teeth..... " 5 25

RASPS—See Files.

RAZORS.

Bo-ras-ic.....50%
Red Devil.....50%
Tree Brand.....50%

REGISTERS.

(All Sizes)

Japanned, Bronzed and Plated...70%
White Porcelain Enameled...50&10%
Solid Brass and Bronze Metal....40%
Single Valve (Baseboard and Sidewall).....70&10%

REGISTER FACES

Japanned, Bronzed and Plated
4x6 to 14x14.....70%
14x14 to 38x42.....75&10%
Heavy Round Gratings.....75&10%
White Porcelain Enameled...50&10%
Solid Brass or Bronze Metal.....40%

RINGS.

Bull.

Copper	2½ in.	3in.
Per doz	$1 10	$1 40
Rea's Improved Self-Piercing copper, pr doz	2 00	....
Steel, per doz	85	95
Nickel plated	1 35	....

and Ringers—Hog.
Blair's Rings.....per doz. $0 58
Blair's Ringers..... " 75
Brown's Rings..... 50
Brown's Ringers..... " 80
Champion Ringers.... " 60
Hill's Ringers..... " 70
Hill's Ring, boxes.... " 47
Major Rings..... " 60
Perfect Ringers..... " 95
Wolverine Rings..... " 1 40
Wolverine Ringers.... " 80
Fruit Jar.
White.....per lb.....30c
Key.
Split, round.....per doz. $0 17
Split, square..... " 32
Ball, round..... " 32

RIVETS.

and Burrs.
Copper Belt.....40%
Coppered Iron.....60&10&5%
Tinners'.....60&10%
Hame.....per lb. $0 10
Slotted Clinch per doz 40c@45c
Tubular
Nos 1 and 2 assorted sizes, doz, 45c

RIVET SETS

See Sets.

ROPE.

Cotton.
¼, 5-16 in. Com on reels. .per lb. 11½c
¼, 5-16 in Com. in coils. . " 12 c
¼, 5-16 Imperial in coils.. " 21 c
Sisal
1st Quality.....12 c
Hardware Grade, rates, per lb...10 c
Pure Manila.
1st quality.....per lb. 15½c
Hardware Grade, rates... " 14½c

RULES.

Boxwood.....50&10%
Ivory.....

SASH WEIGHTS.

See Weights.

SAWS.

Back.
Disston's.....25%
Jackson's.....25%
Butchers'.
Disston's.....30%
Circular.
Disston's.....50%
Hiles'.....50&10%
Compass.
Common.....per doz $1 35@1 60
Disston's .....%25
Cross-Cut
Disston's.....45%
Dehorning.
Disston's.....per doz. $5 75
Hack.
Disston's.....25%
Keystone.....30%
Hand and Rip.
Brown's.....30%
Disston's No. 7.....30%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120 (new list).....25%
Keystone.....30%
Enterprize, hand.....per doz. $5 00
Our Saw, hand..... " 4 00
Our Saw, rip..... " 4 50
Keyhole—Disston's.....25%
Kitchen.
Sterling 25%
One Man.....50%
Panel
Brown's 30%
Disston's No. 7.....30%
Disston's No. D100.....25%
Pruning.
Brown's 25%
Disston's 25%
Wood
Common.....per doz $4 50
Clover Leaf..... " 6 00

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 25
Common, painted..... " 1 70

SCALES.

Counter.
Pelouze.....40&10%
Platform.
Osgood.....50%

SCOOPS.

Grain.
½-bu. "Hercules".....per doz. 13 70
1-bu. "Hercules"..... " 15 00

SCRAPERS.

Box.
Triangular.....per doz. $4 00
Cabinet.
Cast Steel . . . . per doz , 60c@75c
Road.

Cubic ft.	7	5	3
Without run's, ea.	$4.00	3.75	3.50
With runners, ea..	4.25	4.00	3.75

SCREWS.

Bench.

Iron, in	1	1½	1½
	$3.50	4.00	4.75

Wood, white maple...per doz. $3 50
Hand—Wood.....10%
Hand Rail.....80&10%
Jack.....70&10&5%
Lag or Coach—all sizes, gimlet pointed.....75&5%
Saw—Centennial.

Nos	1	2	3	4	5	6
Per doz.	18c	20c	26c	30c	23c	25c

Wood.
F. H. Bright.....87½&5%
R H Blued.....85%
F. H. Jap'd.....82½%
F. H. Brass.....85%
R. H. Brass.....80%
R. H. Nickel Plated.....75-10%

SCYTHES.

Be Ve Be, grass.....per doz. $8 00
Clipper, grass..... " 8 25
Clover Leaf Dutchman. " 7 50
Honest Dutchman..... " 7 50
Be Ve Be..... " 7 50

SHAVING SETS.

Smith & Hemenway.....60%

SETS.

Nail.
Round, common.....per doz. $0 33
Square, common..... " 42
Octagon, common.... " 33
No. 5, square..... " 75
Cup point, knurled... " 75
Rivet.
Farmers'.....per doz. $1 20
Tinners'.....50&10%
Saw.
Aiken's Pattern.....per doz $3 50
Common Lever..... " 1 20
Disston's Monarch.... " 6 50
Disston's X Cut ..... " 12 00
German..... " 1 05
Leach's..... " 80
Nash's Hand..... " 3 15
Nash's X Cut..... " 4 20
Stillman's Lever..... " 1 30
Stillman's X Cut..... " 2 50

SHARPENERS, SKATE.

Diamond.....per doz $1 00
Smith & Hemenway 20%

SHAVES, SPOKE

Iron.....per doz $1 10@1 85
Wood ..... " 2 75@4 75
Bailey's .....50&5%
Goodell's 15%

SHEARS

Pruning
Buckeye, No. 1.....per doz $5 75
Buckeye, No. 2..... " 7 40
California Pat., 9-in.. " 3 20
Cailfornia Pat., 10-in.. " 4 00
Draw Cut, No. 3..... " 13 75
Draw Cut, No. 4..... " 16 50
Henry's Pat. 0 01 14 012
Per doz.....$1.40 2.10 2.90 2.80
Star.....per doz $4 00
Sheep—No BBA.
Inches..... 6 6½ 7
Reg. Grip.....$11.25 11.50 12.00
Nar. Grip.,doz.... 11.00 11.25 12.25
Tinners'—See Snips.

SHEAVES, SLIDING DOOR.

Common.
Inches..... 3 4 5
Per set..... $0.34 .42 .70
Hatfield's.
Per set..... $0.75 1.00 1.60

SHELLS—See Ammunition.

SHELLERS, CORN.

Union.....per doz. $6 75

SHIELDS.

Expansion Bolt Shields.....50&10%

SHOES.

Conductor.....60&10%

SHOT—See Ammunition.

SHOVELS AND SPADES

Coal.
No 2 Woodford.....per doz. $5 50
No. 182..... " 6 00
Ames' new list .....Discount, 12½%
Per doz.
Neverbreak, hollow bck, blk. $15 75
National.... " " " 14 75
Buckeye.... " " " 10 00
Mohawk.... " " " 9 00
Drain.
Iwan's Perfection.....50%
Railroad, etc.
Black Diamond.....per doz. $1 50
Crescent..... " 5 75
Keystone..... " 8 75
Star..... " 4 75
Vaterland..... " 9 50
Hollow Back..... " 4 75
Ames, new list .....Discount, 12½%
Snow.
Per doz.....$1.65@$9.00
Alaska Steel.
D Handle.....per doz. $3 50
Long Handle..... " 3 00

SINKS.

Cast Iron.
Painted.....50&10%
Enameled, White.....50&10%
Wrought Steel.
Painted, new list.....40-10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.

Champion.....33⅓%
German Pattern.....30&5%
Judd's Pattern.....50%

SNATHS.

Double Ring, Bush.....per doz. $6 00
Patent Loop, Bush..... " 5 75
Patent Loop, Grass..... " 5 50

SNIPS, TINNERS'.

Clover Leaf.....40&10%
National.....40&10%

SOLDER—See Metals.

SPRINGS, DOOR.

Perfect.
Nos..... 1 2 3 4
Per doz.....30c 35c 40c 54c
Reliance.
Per doz ...light, $1.25; heavy, $2 50
Star.
Per doz ....light, 90c; heavy, $1 35
Torrey's.....per doz. $1 35
Warner's No. 11 13
Per doz..... ..... 75c $1 35

SQUARES.

Steel and Iron.....70&10%
(Add for bluing, $2.50 per doz., net.)
Mitre.
Try.
Try and Bevel.
Try and Miter.
Fox's.....per doz. $5 75
Winterbottom's.....70%

SQUEEZERS, LEMON.

Common Wood.....per doz. $0 70
Porcelain Lined, Wood.. " 1 25
Boss, malleable iron.... " 1 20
Iron Frame, porc'n bowl " 1 90
Iron Frame, glass bowl . " 2 35
Little Giant, tin'd iron . " 4 00
Drum, japanned..... " 3 60
Drum, nickel plated ... " 4 50

STAPLES

Blind.
Barbed.....per lb ..9½@9½c
Butter Tub..... " .....8 @8½c
Fence—less than carload.
Polished.....per 100 lbs. $2 30
Galvanized..... " 2 60
Netting.
Galvanized.....per 100 lbs. 4 00
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples.....80-10&10%
Extra heavy.....75&10%

STEELYARD.

Discount 25%.

STONES.

Axe.
Hindostan.....per lb 5½@7 c
More Grit..... " 9½c
Washita ..... " 17 c
Emery.....60%@60&5%
Oil—Mounted.
Arkansas Hard.....per doz.$23 00
Arkansas Soft..... " 15 50
Hindostan .....per lb 6½@6½
Oil—Unmounted.
Arkansas Hard.....per lb $2 05
Arkansas Soft ..... " 1 10
Lily White..... " 45
Queer Creek..... " 15
Ouachita..... " 38
Washita..... " 26
Sythe.
Black Diamond.....per gro. $8 00
Crescent..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 50
La Moille .... " 7 00
Quinnebog..... " 5 00
Red End ..... " 3 75

STOPS, BENCH.

Hotchkiss'.....per doz. $3 50
Stearns'..... " 4 75

STOPPERS, FLUE.

Common.....per doz. $0 40
Crown..... " 45
Gem, flat, painted..... " 85
Gem, cor'd, decorated... " 70
Kirch's..... " 90
Perfect..... " 70@85
Skinner's Common Sense " 80

STOVE PIPE—See Pipe.

STOVE BOARDS—See Boards

STOVE POLISH—See Polish.

STRAPS.

Scoop.....per doz prs., $1 85
Shate..... " " 60@70c

STRETCHERS.

Carpet.
Bullard's.....per doz. $3 90
Excelsior..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50
Wire.
N. S. Elwood's.....per doz. $6 00
O. S. Elwood's..... " 6 00
Little Giant..... " 5 75
Safety..... " 10 00
Star Lever..... " 6 25
Canton Tackle Block. " 9 50
Warner's ..... " 6 25

SWIVELS.

Malleable Iron.....per lb. $0 70
Wrought Steel.....per gro. 4 50

TACKS.

American Cut.....90&15%
American Wire.....85&20%
Bill Posters Cut.....90&20%
Blued Carpet.....90&10%
Tinned Carpet.....90&10%
Gimp.....90&10%
Upholsters' Cut.....90&20%
Upholsters' Wire.....90&10%
Double Pointed.....90%
Copper.....per lb. 32c
Canvas Nails.....75&5%
Clout Nails.....75&10%
Hungarian Nails.....80%

TAPES, MEASURING.

Asses' Skin.....40&10%
Bend Leather.....20%
Patent Leather.....20%
Lufkin's Steel.....25%
Lufkin's Metallic.....30%

TEE BEVELS—See Bevels.

THERMOMETERS.

Tin Case.....per doz. 80c@$1 25
Wood Back..... " $2.00@12 00
Glass..... " 12 00

TIES.

Bale.
Single Loop.....80&5%
All other kinds.....70%
Cow—See "Chains."

TOOLS, SAW.

Disston's Universal.....40%
Miniature.
Smith & Hemenway.....25%

TRAPS.

Fly.
Ballon.....per doz. $1 25
Harper's..... " 1 35
Game.
Newhouse.....40&10%
New Victor.....70&10%
Mole.
Reddick's.....per doz. $6 00
Mouse and Rat.
Wood Choker ..per doz. holes $0 13
Tin Choker .... " " 75
Delusion.....per doz. 1 15
Marty Rat..... " 6 25
Marty Rat Imitation. " 3 50
Marty Mouse..... " 3 00
Marty Mouse Imitation " 2 00
Hold-em, wire rat.... " 3 75

TROWELS.

Brick.
Clover Leaf.....30%
Brade's.....15&5%
Disston's.....30%
Rose's.....20%
Plasterers'.
Clover Leaf.....40%
Disston's.....25%
W. & McP.....25%

TRUCKS.

Bag..... each, $2 75
Handy..... " 1 85
Warehouse.....50&10%

No.	1	2	3
Half Ironed.....	$3.00	3.85	5.50
Full Ironed.....	3.45	4.50	6.45

TUBS, WASH

Standard, Wood. Nos.	3	2	1	Ex. large
Per doz.....	$5.00	6.00	7.00	9.50
Dowell. Per doz.....	5.35	6.35	7.00	9.50
Cedar. Per doz.....	6.10	7.10	7.90	10.80
Indurated. Per doz.....	8.55	9.45	10.80	13.50

Galvanized.

No.	1	2	3
Per doz.....	$6.00	6.75	7.75

TWINE.

Per lb.
3-ply Cotton Wrapping ... .25c
4 " " " 25c
" " Extra Wrapping.....27c
4 " " " Hvy. Wrapping 25c
4 " " Wrapping on tubes....27c
3 " " " " cones....25c
4 " " " " " 25c
India Hemp, ½-lb. balls 19c
" " ½-lb. " 18c
" " ¼-lb. " .....doz. 75c
2-ply Jute, ½-lb. " 14c
3-ply Jute, ½-lb. " 13c
Jute Wrapping, ½-lb. balls.....14c
Jute Wool, 1-lb. balls.....9½c
Seins.

Nos.....	9	12	15
Soft.....per lb	26½	26	25
Med..... "	26½	26	25
Hard..... "	27	26½	26

Staging, ½-lb. ball, size 21.....26½c
" " " " 24.....26c
" " " " 27.....26c
Bagging " " 23c
3-ply "B" in hanks 18c
4- " "B" " 18c
3 " "A" " 27c
3 " Silver Finish, in hanks...37c
Fodder or Lath.
130 strand.....6½c
200 strand.....—c

VISES.

Phœnix..... .....30%
Phœnix Oval Slide.

Inches.....	2½	3	3½	4½
Each.....	$1.25	1.50	1.85	2.75

Parker's Parallel..... 20%
Parker's Victor..... 20%
Parker's Swivel Base..... 20%
Parker's Re-inforced 20%
Parker's X Series..... 20%
Parker's Combination 20%

No. 110, Bicycle..... " $1 50
No. 500, Royal..... " 32 50
No. 350, Universal..... " 28 00
No. 300, Novelty..... " 28 00
No. 310, Keystone..... " 28 00
No. 100, Rival..... " 28 50
Solid Box.....40&5%
Adams' Mechanics'.....each 2 50
Williamson's Universal.....60%

WARE.

Stove Hollow Ware.
Plain or Unground.....50%
Ground Ware.....45%
Enameled Ware.....33⅓%
Country Hollow Ware, per 100 lbs. $3 00
White Enameled Ware.
Maslin Kettles.....60&10%
Covered Ware.
Tin'd and Turn'd.....35&10%
Enameled.....45&10%
Glue Pots,
Tinned.... .....25%
Enameled.....30%
Enameled.
Cherry Blossom and Chrysolite..50%

WASH BOARDS—See Boards.

WASHERS.

Standard O G. cast iron . . .per lb. 2½c
Wrought iron in bulk, per lb.:

In.	½	⅝	¾	⅞	1
	9c	6½c	5c	4½c	4½c	3½c

Wrought steel in 5-lb. boxes, per lb.:

In.	½	⅝	¾	⅞	1
	10	7c	6c	5½c	5c	5c	4½c

WASHING MACHINES—See Machines.

WEDGES.

Ax.....per doz. $0 30
Galling.....per lb. 10⅝
Saw..... " 8½

WEANERS.

Calf.
Fuller's, per doz.....$2 00 to $2 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz..... 3 00 to 3 75
Standard, per doz..... 3 00
Hoosier, per doz..... 3 50 to 4 60

WEIGHTS.

Hitching.....per lb. 2½c
Sash—f.o.b Chicago....pr ton, 26 50

WHEEL BARROWS.

Common Railroad.....per doz. $17 00
Heavy Railroad..... " 24 00
Panama Steel Tray.... " 30 00
Klondike Steel Tray.. " 26 00

WHEELS.

Corundum.....70&10&5%
Emery.....75&5%
Well.

Inches..	8	10	12	14
Per doz.....	$2.40	3.25	4.00	6.00

WIRE.

Barbed.	Painted.	Galv'd
Carloads .. per 100 lbs.	$2.33	$2.63
Less than car "	2.43	2.73

Brass.
In coils.....20%
In 1-lb. spools, new list.....50%
Broom—Tinned . . . 60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils.....20&10%33⅓%
1-lb. spools, new list.....50&10%
Fence—Smooth.
Nos. 6 to 9, An'eal'd, pr 100 lbs. $2 30
Nos. 6 to 9, Galv'd.. " 2 60
Hair—New List.....50%
Market.
Bright, full bdles.....70&5%
Bright, broken bdles.....70%
Coppered, full bdles.....70%
Coppered, broken bdles.....65&10%
Tinned, full bdles.....75&5%
Tinned, broken bdles.....65&10%
Picture—In coils . . . . 80% @80&10%
In 5-lb. spools.....per lb.....26c
Plain—Small lots..... $2 10
Car lots..... 2 05
Small spools 5c per 100 higher.

WRENCHES.

Acme Standard.....60%
Alligator No. 1.....85cnet
Always Ready.....50%
Agricultural.....75&5%
Ellis Adjustable.....25%
Malleable "S".....per lb. 08c
Malleable..... " 08c
Stillson Pipe.....70%
Bemis & Call's:
Adjustable S, 40&5%; Adjustable S Pipe, 40&5%; Briggs Pattern, 40%; Combination Bright, 50%
Steel Handle Nut.....50&5%
Combination Black.....50&5%
Merrick Pattern.....50&5%
Double End Adj. S.....40&5%

WRINGERS.

No. 22, Guarantee....per doz. $32 50
No. 110, Guarantee.... " 32 50
No. 110, Brighton..... " 23 50

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Auld & Conger Co., Cleveland, O
Connors Paint Mfg. Co., The Wm., Troy, N. Y

Roof Paint
Dixon, Jos. Crucible Co., Jersey City, N. J

Rules
Lufkin Rule Co., Saginaw, Mich

Saw Sets and Saws
Disston, Henry & Sons, Philadelphia, Pa
Smith & Hemenway Co., New York, N. Y

Scales
Pelouze Scale Co., Chicago, Ill

Schools—For Sheet Metal Pattern Drafting
Gray's School, New York, N. Y

Screens—Perforated Metal
Harrington & King Perforating Co., Chicago, Ill

Screws
Columbus Bolt Works, Columbus, O

Screw Drivers
North Bros Mfg. Co., Philadelphia, Pa

Shears
Bertsch & Co., Cambridge City, Ind
Napanee Iron Works, Napanee, Ind
Robinson Mfg. Co., J. M., Cincinnati, O
Wagner, C. DeWitt, Cedar Rapids, Ia

Sheets—Black and Galvanized
American Sheet & Tin Plate Co., Pittsburgh, Pa
Eller Mfg. Co., Canton, O
Griffiths Charcoal Iron Mills, Washington, Pa
Inland Steel Co., Chicago, Ill
Schoedinger, F. O., Columbus, O
Stark Rolling Mill Co., Canton, O
Sykes Steel Roofing Co., Chicago, Ill
Wheeling Corrugating Co., Wheeling, W. Va

Sheets—Planished
American Sheet & Tin Plate Co., Pittsburgh, Pa
Eller Mfg. Co., Canton, O
Follansbee Bros., Pittsburgh, Pa
Griffiths Charcoal Iron Mills, Washington, Pa
Inland Steel Co., Chicago, Ill
Schoedinger, F. O., Columbus, O
Stark Rolling Mill Co., Canton, O
Sykes Steel Roofing Co., Chicago, Ill
Ward-Dickey Steel Co., Indiana Harbor, Ind

Sheets—Steel
American Sheet & Tin Plate Co., Pittsburgh, Pa
American Steel & Wire Co., Chicago, Ill
Eller Mfg. Co., Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Griffiths Charcoal Iron Mills, Washington, Pa
Inland Steel Co., Chicago, Ill
Schoedinger, F. O., Columbus, O
Stark Rolling Mill Co., Canton, O
Sykes Steel Roofing Co., Chicago, Ill

Sheet Metal Ornaments
Berger Mfg. Co., Canton, O
Foster & Sons Co., Wm. Springfield, Ill
Friedley-Voshardt Co., Chicago, Ill
Milwaukee Corrugating Co., Milwaukee, Wis

Sheet Metal Patterns
Gray's School, New York, N. Y

Shelf Boxes
Green & Co., A. H., New York, N. Y

Shelving
Heller & Co., W. B., Montpelier, O
Warren Mfg. Co., J. D., Chicago, Ill

Shovels
Avery Stamping Co., Cleveland, O

Siding
Milwaukee Corrugating Co., Milwaukee, Wis

Sifters
Stuber & Kuck, Peoria, Ill

Skylights
Canton Art Metal Co., Canton, O
Eller Mfg. Co., Canton, O
Milwaukee Corrugating Co., Milwaukee, Wis

Skylight Gearing
Weiss, H. & Co., New York, N. Y

Slate Roofing
Auld & Conger Co., Cleveland, O

Slating Nails
Hussey & Co., C. G., Pittsburgh, Pa

Soldering Fluxes
Ruby Chemical Co., Johnston, Ohio

Squares—Machinists'
Disston, Henry & Sons, Philadelphia, Pa

Stampings—Sheet Metal
Avery Stamping Co., Cleveland, O

Steel
American Steel & Wire Co., Chicago, Ill

Store Fixtures
Heller & Co., W. B., Montpelier, O

Stoves and Ranges
Albany Foundry Co., Albany, N. Y
Champion Steel Range Co., Cleveland, O
Co-operative Fdy Co., Rochester, N. Y
Chicago, Ill
Faultless Malleable Stove Works, St. Charles, Ill
Foster Stove Co., Ironton, O
Monitor Stove & Range Co., Cincinnati, O
Mt. Penn Stove Works, Reading, Pa
Odin Stove Mfg. Co., Erie, Pa.
Quality Stove & Range Co., Belleville, Ill
Sheridan Stove Mfg. Co., Quincy, Ill
Stove & Range Co., of Pittsburgh, Pittsburgh, Pa
Van Range Co., John, Cincinnati, O
Willard, Wm. G., St. Louis, Mo

Stove Mats
Stuber & Kuck, Peoria, Ill

Stove Patterns
Cleveland Castings Pattern Co., Cleveland, O
Cope Pattern, Geo W., Works, Detroit, Mich
Quincy Pattern Co., Quincy, Ill
Vedder Pattern Works, Troy, N. Y
Weller Pattern Co., Quincy, Ill

Stove Pipe
Hemp & Co., St. Louis, Mo
Kinne Mfg. Co., Minneapolis, Minn

Stove Pipe Thimbles
Stuber & Kuck, Peoria, Ill

Stove Polish
Black Silk Stove Polish Wks., Sterling, Ill
Brauer Supply Co., A. G., St. Louis, Mo
Nickel Plate Stove Polish Co., Chicago, Ill

Stove Putty
Connors Paint Mfg. Co., Wm., Troy, N. Y
Dixon, Jos. Crucible Co., Jersey City, N.

Stove Repairs
Brauer, A. G., Supply Co., St. Louis, Mo.
U. S. Stove Repair Co., Minneapolis, Minn

Sugar Kettles
Sperry, D. R. Co., Batavia,

Supplies—Stove Dealers'
Brauer, A. G., Supply Co., St. Louis, Mo

Tapes
Lufkin Rule Co., Saginaw, Mich

Technologist
Hooper, C. N., Dubuque, Iow

Thermometers—Oven
Evans Stamping & Plating Co., Taunton, Mass

Tin—Perforated
Harrington & King Perforating Co., Chicago, Ill

Tinners' Furnaces
Burgess Soldering Fur. Co., Columbus, O
Clayton & Lambert Mfg. Co., Detroit, Mich
Diener Mfg. Co., Geo. W., Chicago, Ill
Meyer Fdy. & Mfg. Co., South Bend, Ind

Tinners' Tools
Armstrong, Blum Mfg. Co., Chicago, I
Auld & Conger Co., Cleveland, O
Berger Bros. Co., Philadelphia, Pa
Bertsch & Co., Cambridge City, Ind
Lufkin Rule Co., Saginaw, Mich
Napanee Iron Works, Napanee, Ind
Niagara Machine & Tool Works, Buffalo, N. Y
Robinson Mfg. Co., J. M., Cincinnati O
Wagner, C. DeWitt, Cedar Rapids, Ia
Weiss & Co., H., New York, N. Y

Tinplate
American Sheet & Tin Plate Co., Pittsburgh, Pa
Eller Mfg. Co., Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Merchant & Evans Co., Philadelphia, Pa
Wheeling Corrugating Co., Wheeling, W. Va

Tinware
New England Enameling Co., New York, N. Y

Tinware Trimmings
Berger Bros. Co., Philadelphia, P
Buttler Bros., Chicago, Ill

Toasters
Kinne Mfg. Co., Minneapolis, Minn

Tools, etc.
Bemis & Call Hdw. & Tool Co., Springfield, Mass
North Bros. Mfg. Co., Philadelphia, Pa
Parker Co., Chas., Meriden, Conn
New York, N. Y
Rock Island Tool Co., Rock Island, Ill
Stanley Rule & Level Co., New Britain, Conn

Tools—See Carpenters' Tools
Tools—Linemen's
Smith & Hemenway Co., New York, N. Y

Torche
Clayton & Lambert Mfg. Co., Detriot, Mich

Trowels
Avery Stamping Co., Cleveland, O
Disston, H. & Sons, Inc., Philadelphia, Pa
Griffin Mfg. Co., Erie, Pa

Tubing—Heavy Tin
Dieckmann, Ferdinand, Cincinnati, O

Ventilators—Wooden
Wooden Ventilator Co., The, East Palestine, O

Ventilators
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Friedley & Voshardt, Co., Chicago, Ill
Globe Ventilator Co., Troy, N. Y
Iwan Mfg. Co., South Bend, Ind
Merchant & Evans Co., Philadelphia, Pa
Milwaukee Corrugating Co., Milwaukee, Wis

Washers
Columbus Bolt Works, Columbus, O

Washing Machines
Brammer Mfg. Co., H. F., Davenport, Ia
White Lily Mfg. Co., Davenport, Ia

Water Coolers
Buffalo Mfg. Co., The, Buffalo, N. Y

Wire
American Steel & Wire Co., Chicago, I
National Wire Cloth Co., Niles, Mich.

Wire Goods
Denning Wire & Fence Co., Cedar Rapids, Ia
National Wire Cloth Co., Niles, Mich
Pittsburg Steel Co., Pittsburgh, Pa

Wrenches
Bemis & Call Hdw. & Tool Co., Springfield, Ill

Wants and Sales

For Paid Yearly subscribers THE AMERICAN ARTISAN will insert under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, business for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they "READ THE ADVERTISEMENT IN THE AMERICAN ARTISAN."

BUSINESS CHANCES.

PATENTS OFFICIAL copy "PATENT LAWS" United States sent on receipt ten cents stamps.
HUBERT E. PECK, Patent Attorney, 629 F Street, Washington, D. C.

Wanted, To Rent—Shop and tools, or would run shop on shares. Country town or small city. Shop connected with hardware preferred. Address S-37, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 1-3t

For Sale—Stock of hardware, stoves, tinware, tin shop tools, stock and plumbing goods valued at about $3,000 in northern part of Illinois. Good farming and dairy country. Rent reasonable. Address S-33, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 26-3t

For Sale—Tinshop, roofing, furnace and torpedo sheet shop in south eastern Illinois, in the center of the Illinois oil belt. Death of owner reason for selling. Address Scott Mfg. Co., Robinson, Illinois. 26-3t

For Sale—Good clean $6,000 stock of hardware and furniture. Must have cash. Doing good business. Address H. D. Mohr, Akron, Iowa. 26-3t

For Sale—$7,000 stock of hardware; only hardware stock in a town of over 1,000. Doing good business; good opportunity. Address S-31, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 5-3t

For Sale—Up-to-date hardware; about $5,000; well assorted; will sell at a bargain. Also store building; good rooms above, and lot 22x140. Best location in town. Snap at $2,000. Part time on building and lot if wanted. This will bear close investigation. Annual sales $15,000; good town and country. Good prices and honorable competition: No trade considered. Address S-23, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 25-3t

For Sale—$900 worth of stock in a furnace company. Will sell at a bargain. Address J. T. O'Hara, 2099 Jackson St., Chicago, Illinois. 25-3t

For Sale—Old established hardware business, making money in central Wisconsin. Population of town, 1,000; stock, $7,500; large territory. Can rent building. Only two hardware stores in town. Plenty of work at good prices. Bargain for some one. Reason for selling, going west. Address S-25, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 25-3t

For Sale—Fine new stock of tinner's tools, hardware, stoves, and granite ware. Invoice about $2,500. 100 miles north of Chicago. Will sell the hardware without the tools if desired. Will discount 10% for cash deal. Cash deal only. Now is your chance to get a bargain. Address S-26, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 25-2t

For Sale—In Eastern Ohio town of 2,300, tinner's and slater's tools and stock. Four and five men working. Would sell half interest. If it is business you want, here it is. Address S-27, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 25-3t

For Sale—Clean stock of hardware, tin and plumbing shop, in good clean town of 1,600 inhabitants and excellent farming country in East-Central Iowa. Old established business. Cause of selling, death of senior member of firm and must settle estate. Address S-28, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 25-3t

For Sale—Well established tin, jobbing and furnace shop. Employ two to six men. Will invoice about $800. Is first-class opening for tinner. Have run shop nine years. Reason for selling is failing health. Address T. R. Freeman, 229 S. Main Ave., Sioux Falls, South Dakota. 25-3t

For Sale—Tin and pump shop in good part of Kansas and good business. Address Ward H. Parker, Fairview, Kansas. 25-3t

TINNER'S TOOLS.

For Sale—1 No. 3 V. & O. Inclinable open back power press, weight complete, 2,750 lbs. Used sixty days; good as new. Address Barrett Hardware Co., Joliet, Illinois. 25-3t

HELP WANTED.

Wanted—Good tinner in country town, if competent; to clerk some. Steady job to right party. References required. State experience and wages wanted. Address W. E. Downs, Crary, North Dakota. 1-3t

Wanted, Good Tinner—For roofing, spouting and general repair work. Must be sober and honest. Address Box 38, Albany, Indiana. 1-3t

Wanted, At Once—Good reliable man for our tinshop. We have regular country work. Good set of tools and steady work by the year at good wages. Address August Ebert, Truman, Minnesota. 1-3t

Wanted—First-class tinner. One that can take charge of shop and estimate correctly from plans. Strictly sober. Work the year around for right party at good wages. Address S-35, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 1-3t

Wanted, Tinner—In town of 1,000; all around man; clerk in store part of time; also repair pumps. Steady job at good wages. State wages wanted in first letter. Address H. F. Dallman, Clinton, Wisconsin. 1-3t

Wanted, At Once—First-class tinner that can do plumbing and hot water heating. One not afraid of work. Will pay first-class man $3 per day; none other need apply. Address Tyler & Hallas, Salem, South Dakota. 1-1t

Wanted—First-class tinner and furnace man at once in good town of 5,000. Good shop, good tools, good pay. State wages wanted in first letter. Full charge of shop. Address A. E. J., 1010 Cedar St., Atlantic, Iowa. 1-3t

Wanted—Good tinner and plumber. Must be sober and reliable. Address M. Armbruster, Eagle Grove, Iowa. 26-3t

Wanted—Tinner and plumber. In town of 800. Must be good all around man able to do furnace work, also clerk in store. We will give steady work. State wages and send references in first letter. No boozer wanted. Address Abbott Bros., Sargent, Nebraska. 26-3t

Wanted—Experienced clerk for hardware store. Give references. Address S-32, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 26-3t

Wanted—Good tinner in town of 800; one who can do some plumbing and furnace work, and sometimes look after stoves and clerk in store evenings. Must be sober, honest, reliable and reason for change. Married man preferred. Wages $60, with prospects of a raise for a hustler, or perhaps an interest. Address for a pleasant job, Lock Box 315, Alden, Minnesota. 26-3t

Wanted—Good tinner, one used to hot water heating and pipe work. State wages and interesting facts in first letter. No boozer wanted. Address H. A. Lee, Canton, South Dakota. 26-3t

Wanted—First-class plumber who can do ordinary tin work, such as spouting, roofing, etc. Steady position at good wages to the right man. References required. Please state full particulars in first letter. Address The Gray Hardware & Implement Co., St. John, Kansas. 26-1t

Wanted—Two specialty salesmen to carry five strong lines on commission. Illinois territory. Address S-34, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago, Ill.

Wanted, Tinner—At once, for general outside work. Address L. J. Gasser, Jasper, Indiana. 26-3t

Wanted—An A-1 competent hardware salesman. Must have 10 years' experience and furnish the best of references and be able to manage good live store in the absence of owner. Address H. C. Wittman, Lincoln, Nebraska. 26-ufn

Wanted — First-class tinner's foreman in sheet metal works, including heating, ventilating, cornice and skylight work. One competent to estimate, draft and detail work. Address S-30, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 25-3t

Wanted, Tinner and Slater — Steady work and good wages to first-class mechanic. Address T. H. Norr, Piqua, Ohio. 25-3t

Wanted—Strictly first-class tinner and plumber. Must be strictly sober and honest. Apply at once. Address Spradling & Flagg, Hoopeston, Illinois. 25-3t

Wanted, Plumber and Steam Fitter—The right man can have work by the year at good salary. Address Garmen & Forkenbrock, New Hampton, Iowa. 25-3t

Wanted—Pump and wind mill man who can do pipe work, hang eave trough and do some tin work. State wages and give reference. Must be sober and reliable. Address Joseph Wiloth, Marble Rock, Iowa. 25-3t

Wanted—First-class tinner at once. Steady work. State wages and experience in first letter. Address Hastings Sheet Metal Works, Hastings, Nebraska. 25-3t

Wanted, Good Tinner—To do such work as generally comes to country shop. One preferred who can do pipe work and plumbing. Steady work the year around in nice city of 3,000 people. Married man preferred. State wages and ability in first letter. Will not keep a drinker. Address Fred L. Parish, Waupaca, Wisconsin. 25-3t

Wanted—Five first-class tinners. Must be first-class on tinning, furnace and slate roofing. Steady employment. Also one first-class tinner and plumber. Address Macomb Sheet Metal Works, Macomb, Illinois. 25-3t

Wanted—Good all around tinner and furnace man. Inside and outside work. Wages $18 per week and job year around to steady man. Give references. Address O'Brien Bros., Devils Lake, North Dakota. 25-3t

SITUATIONS WANTED.

Wanted, Position—As clerk in hardware store by capable young man. Illinois preferred. Address George Irps, Chebanse, Illinois. 1-3t

Situation Wanted—As hardware salesman. Must be steady job and can guarantee results. Would like position with firm doing $50,000 a year or better. Wages $75 to start, with raise as soon as I prove my ability. Address S-36, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 1-3t

Situation Wanted—General hardware man doing tinning, furnace and hot water heating, some plumbing. Iowa or Illinois preferred. Wages $75 to $85 per month. No dull seasons where I work. Address S-31, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 26-3t

SPECIAL NOTICES.

SALESMAN WANTED.

A first class furnace and boiler salesman for city work. Address stating age, experience and salary expected. R. J. Schwab & Sons Company, Milwaukee, Wisconsin. 1-ufn

SALESMAN WANTED.

Wanted experienced stove salesman for well known line of ranges and heaters. State experience, territory and salary expected. We are looking for salesman who can deliver the goods. Position open Jan. 1st, 1910. All communications strictly confidential. Address W. 26, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago, Ill. 1-ufn

FOR SALE

Fire insurance policy that is absolute protection by the Hardware Dealers' Mutual Fire Insurance Company of Wisconsin, which has been paying

50%

dividends for several years and trebled its surplus frequently. It belongs to the Policy Holders and no one else. Expenses, 7%; Losses, 12-1/2%. Policies written all over the United States. Write the Secretary about it to-day.

C. A. PECK, Secretary, Berlin, Wisconsin.
Under supervision of State Insurance Committee.

Liquid and paste, one quality.

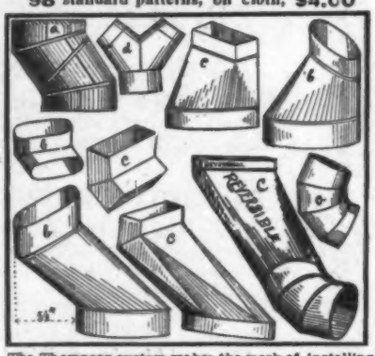
Of Course You Sell
Black Silk Stove Polish

Because you appreciate the fact that it pleases the consumers, and your trade will continually increase.

5 lb. cans for dealers' use.
Domestic packages for retailing.
Buy through your jobber.

BLACK SILK STOVE POLISH WORKS,
Sterling, Ill.

A Complete Line of THOMPSON Patterns for Furnace Fittings.
98 standard patterns, on paper, $3.00
98 standard patterns, on cloth, $4.00



The Thompson system makes the work of installing sidewall or floor registers easy; any shape, any size stack from 3¼x10½ to 5½x15 inches. Elbows from 1 to 18 inches, in 2, 3, 4 and 5 piece.

Thompson fittings have correct lines and will save time and trouble. These patterns are full size, sent post-paid on receipt of price.

H. F. THOMPSON Boat & Pattern Works
507-509 E. Main St., DECORAH, IOWA.

SPECIAL NOTICES.

WANTED

Salesman visiting stove and hardware trade to handle household specialty as a side line; extensively advertised in largest magazines; easy seller; immense sales; big profits. In writing state line you are selling and territory you cover. Address C. E. Swartzbaugh, 1340 W. Bancroft St., Toledo, O. 24-4t

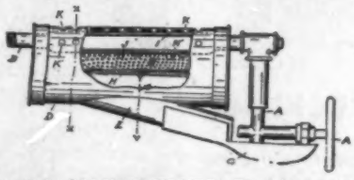
HERE'S YOUR CHANCE

To buy a good up-to-date Warm Air Furnace business commanding the best class of trade in one of the largest cities in Ohio. This is no dead game, but owners are otherwise engaged. A fine chance for a couple of energetic men. Address with full particulars. W-24, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 25-ufn

Salesmen Wanted

The Martin Manufacturing Co. of Mason City, Iowa, makers of the very highest classes of sheet metal goods, consisting of a complete line of tin ware, galvanized iron ware, copper nickel plated ware, and three colors in enamel steel ware, have an opening for a few first class experienced tin and enamel ware salesmen. This is a splendid opportunity for a salesman who has the ability to secure a good position. Address all orders or communications to Martin Manufacturing Company, Mason City, Iowa. 23-ufn

PATENT FOR SALE



918,622 GASOLINE BURNER. Filed Aug. 6, 1908. Serial No 447,220. Will sell on royalty or outright to responsible manufacturer. It is a powerful heater and can be used for heating purposes, for gasoline, wood or coal stoves, heating water, soldering irons, etc. Address for full particulars, WM. T. WHELAN, 1001 South 10th Street, St. Joseph, Mo.

WANTED.

Good tinners and furnace men. Steady work if first-class men. Open shop. No labor troubles. State full particulars in first letter. Address Superintendent of the Peck-Williamson Heating & Ventilating Company, Cincinnati, Ohio 23-

WANTED

Manufacturers or jobbers agency line for Oklahoma territory. Address "Jobber," care of THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 21-ufn.

MODERN STOVE PLANT FOR SALE

Favorably located in a prosperous city in the Central States. Brick saw-tooth roof foundry, sheet steel shops, plating plant, mounting rooms and warehouses. Each equipped with new modern machinery and independent electric motors throughout. Complete line of up-to-date patterns for medium-priced cast and steel coal and gas stoves and ranges. Ample sidings and ground. Product well and favorably known. An unusual opportunity. Address Stove Plant care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 26-2t

I WILL TELL YOU OF A PROFITABLE BUSINESS

One in which the profits are large and the chances of success exceptional. I also know of many good openings for retail stores which I will be glad to tell you of, if you will write me to-day. EDWARD B. MOON, 13 West Randolph St., Chicago.

DIXON'S PIPE-JOINT COMPOUND

for all screw and flange connections. Makes thoroughly tight joints, but allows the joints to be unmade at any time without damage to tools or fittings. Write for free sample.

JOSEPH DIXON CRUCIBLE CO., Jersey City, N. J.

Every Retailer

should secure a copy of

THE AMERICAN ARTISAN ADVERTISING MANUAL

Experts agree that it is a book of inestimable value to those who wish to prepare advertisements that will bring results.

Read their opinions as given below:

From "DOMESTIC ENGINEERING," Chicago

"The book is of undoubted worth as an aid to the retail merchant in preparing that desirable but illusive style of advertising copy known as "printed persuasion."

From "NATIONAL HARNESS REVIEW," Chicago.

"Its pages teem with salient points concerning texts, typographical displays and other essentials which go into the make-up of a business getting announcement."

From "PRESTO," Chicago.

"It would be impossible to estimate the value of the book to hardware merchants."

From "TRADE," Detroit, Mich.

"This book is thoroughly practical."

From "THE BUFFALO EXPRESS," Buffalo, N. Y.

"It contains many reproductions of successful advertisements."

From "THE WEEKLY IMPLEMENT TRADE JOURNAL," Kansas City, Mo.

"It is a reproduction of the retailers advertisements and criticisms of same."

From "FARM IMPLEMENT NEWS," Chicago.

"It is a compilation of all kinds of display advertisements as they actually appeared in different newspapers."

From "THE HOUSE FURNISHING REVIEW," New York.

"This book is useful to the ad man."

From F. R. SWITZER CO., "SUCCESSFUL ADVERTISING," Utica, N. Y.

"We have glanced through THE AMERICAN ARTISAN ADVERTISING MANUAL, and it certainly ought to be of considerable interest to the retail hardware trade, and we think you deserve considerable credit for the undertaking."

From "THE THRESHERMEN'S REVIEW," St. Joseph, Mich.

"A very effective monitor of retail advertising." "It should be a very valuable book for the dealer who wants newest ideas and best methods of expression in ad writing."

From "HARDWARE," New York.

"The book is a practical help for hardware dealers."

From "STOVES AND HARDWARE REPORTER," St. Louis, Mo.

"A fund of information on the subject of advertising calculated to enable the retail dealers to obtain the best results from newspaper advertising."

From "THE METAL WORKER," New York.

"THE ADVERTISING MANUAL will be found of assistance to stove dealers, sheet metal workers, plumbers, hardware men and all who seek to extend their business by advertising."

From "THE TRADESMEN," Chattanooga, Tenn.

"If the average hardware or stove dealer, to whom this book should prove of especial benefit, had some assistance in the preparation of his advertising copy, he would be able to prepare advertisements at all times that would be of the business getting kind."

It should have a place in every store.

Improve your advertising, Mr. Dealer. THE AMERICAN ARTISAN ADVERTISING MANUAL will aid you. Secure a copy to-day.

The book retails at $3.50, and it can be obtained from your bookseller or from

DANIEL STERN

PUBLISHER

355 Dearborn Street, Chicago

THE RIGHT KIND
of Oven Thermometer is

THE "ACME"

THE "ACME"

MADE BY EVANS STAMPING AND PLATING COMPANY TAUNTON, MASS.
Western Agent, C. H. MATTHEWS, Detroit, Mich.

MICA

STOVE POLISH

A. G. Brauer Supply Co
316-318 N. THIRD ST.
ST. LOUIS. MISSOURI.

FURNACE REPAIRS

CHIMNEY TOPS

REPAIRS
TO FIT ALL STOVES AND FURNACES
PROMPT SHIPMENTS ASK FOR ORDER BLANKS
U. S. STOVE REPAIR COMPANY
13-15 South Third St., Minneapolis, Minn.

PEERLESS ENAMEL
ASK YOUR JOBBER
GLOSS BLACK FOR STOVE PIPES AND ALL IRON WORK
ALUMINUM FOR RADIATORS PIPES, ETC.
WRITE FOR SAMPLE
NICKEL PLATE STOVE POLISH CO., MFRS.
CHICAGO

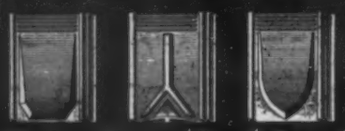
SPERRY'S SUGAR KETTLES

Light, smooth, full measure and guaranteed perfect. Made from original patterns. Metal, the right kind in the right place. Ask your jobber for them or write us.

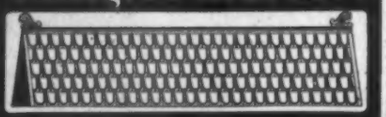
D. R. SPERRY & CO. HOLLOW-WARE FOUNDERS Batavia, Ill.

Put That Advertisement in THE AMERICAN ARTISAN If You Want Results

WALTERS'



Shingles that last



Made from Galvanized Tin and Painted Tin
Storm, Rust and Fire Proof
Do you want to increase your business? This is your opportunity. Write for catalogue, samples and prices.
National Sheet Metal Roofing Co.
JERSEY CITY, N. J.

WRITE FOR PRICES on
ROOFING SLATE
THE AULD & CONGER CO.
Manufacturers and Dealers
999 Prospect Street
CLEVELAND, OHIO

QUINCY PATTERN CO
IRON & WOOD
STOVE PATTERNS
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PATTERNS
For Stoves and Heaters
First-Class in Wood and Iron
Vedder Pattern Works, Troy, N.Y.
Established 1855

PATTERNS
For Stoves and Heaters
The Cleveland Castings Pattern Co.
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WELLER PATTERN CO
DESIGNS and ESTIMATES FURNISHED FOR ALL KINDS OF STOVE PATTERNS
QUINCY, ILL.

THE Geo. W. Cope STOVE PATTERN WORKS Cor. Brush and Woodbridge Streets
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THE ONLY ONE

"Indincible Lock Joint"

Others, no matter how long they have been on the market, are lock joint only in name. Ours will help you make the Steel Ceiling business more profitable. Less furring strips and less labor makes a decided advantage. This is not a get-rich-quick scheme that will make you rich with a few jobs, but a practical improvement that will not only help get the orders in competition with anybody, anywhere, but will help you make more money on the job. It will secure you a steady profit on all your work, and that is what counts.

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We have a Good Proposition to offer

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Columbus, O.
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Beautiful Ceiling Effects are obtained with

FOSTER METAL CEILINGS

Our ceilings are made from the best quality sheet metal and are the easiest to erect of any on the market.

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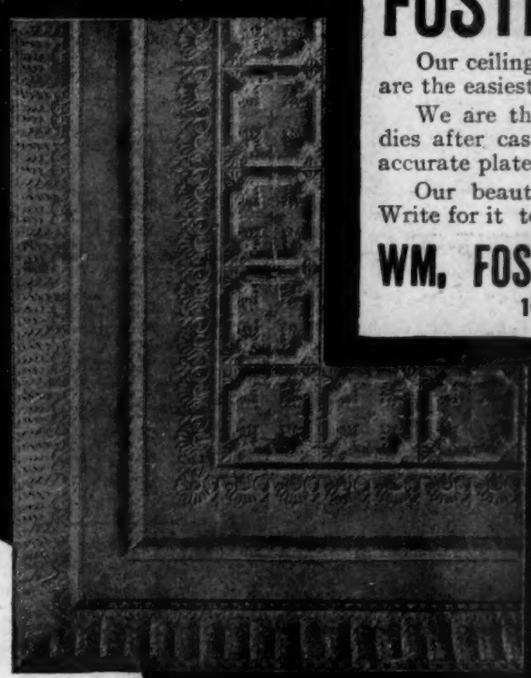

We also manufacture Radiator Shields, Fire-proof Window Frames and Sash, Hip Shingles, Cornices, Skylights, etc., etc.

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Yes—Four Brands that cannot be equaled anywhere.
WE CAN PROVE IT.

¶ Send for our New Shingle Book and be treated to an agreeable surprise. It is free.

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Guarantee *F. Dieckmann* **Stamped in the Metal.**

Galvanized Steel, Charcoal Iron, Copper, Ingot Iron, Terne, Brass, Zinc.

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STATION B. CINCINNATI, OHIO. PATENTED

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BLACK GALVANIZED

Sometimes the Sheet Metal Man gets tired hearing about something better than what he sells or handles and he says, "What good will it do ME?"

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INLAND
OPEN HEARTH

INLAND STEEL CO.
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Galvanized—Perfectly coated—will not peel.

Black—Blue Annealed and Box Annealed.

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Use this brand and you will continue to do so.

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¶ There are no others that are just as good for Cortright Metal Shingles stand pre-eminent in the shingle line. The Cortright Roofs laid 22 years ago are good as new today and have never needed repairs consequently they have made their reputation. You are perfectly safe in recommending them to your clients as we stand back of you and of all the shingles we manufacture; to show our faith in the goods we sell we stamp every shingle with the words

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SOLDERING FURNACE

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Always Ready—No Smoke—No Odor—No Noise—Unexcelled—Unequalled—Unrivaled—Safe—Sure—Durable.

Galvanized Iron, Brass or Copper Reservoir
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The most economical and hottest on the market. Noiseless, odorless and smokeless in operation. Our No. 10 has the greatest range in heating of any furnace made, namely 3 to 12 pound coppers, indoors or on a roof in cold and windy weather. Order of your jobber or we will ship direct for $6.50, on 30 days' approval.

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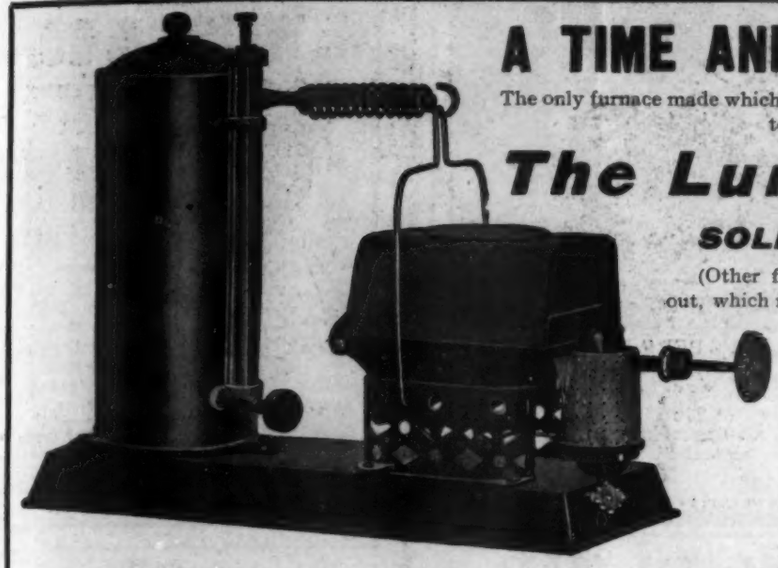

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The only furnace made which forces **Both Hot Blasts** from the outside to the center.

The Lundy Double Blast SOLDERING FURNACE

(Other furnaces force the heat from the center out, which means a continual loss of heat.)

We guarantee that **THE LUNDY** will heat irons faster than a tinner can cool them.

That it will heat irons more than twice as fast as any other furnace made.

That it uses less gasoline than any soldering furnace on earth.

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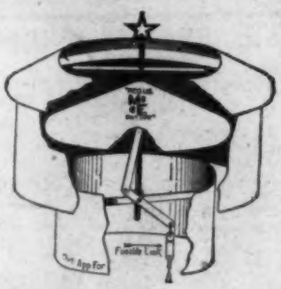

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Embody everything in the Best Scientific Storm Proof Ventilator.

MERCHANT'S METAL "SPANISH" TILES and "GOTHIC" SHINGLES.

These Tiles and Shingles have proved meritorious for years. They are in demand where ornamentation is essential. Also Lightness and Durability are special features of merit.

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Made with Metal and Glass Tops and with and without **Automatic** closing device.

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Makers of Cornice, Skylights, Metal Ceilings, Eaves Trough, Conductor Pipe, etc.

Metal Roofing and Siding.
Corrugated Sheets, painted or galvanized.
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Skylights.
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Deep bead. Positively guaranteed not to cut the metal. Very rapid. No experience required.

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Leading Dealers buy ELLER'S PERFECT FIT STEEL CEILINGS because of their advantage over other makes, in being neatly and quickly erected. Send for catalogue.

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Tinsmiths' and Plumbers' Tools. Cornice Makers Tools. Coppersmiths Tools. Pipe Threading Machines.

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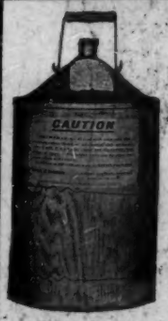

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It is anti-rusting, non-corrosive, non-poisonous and non-explosive, not affected by age, change of temperature, or exposure in open vessels. It is a perfect flux for GALVANIZED and ALL other metals. Shipped in tin cans, ready for use. On approval. Ask for booklet.

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This Forming Roll is built in all standard sizes, with our Patented Opening Device, by means of which it is opened and closed in a few seconds. We build a complete line of Shears and Punches, all sizes, for hand or belt power.

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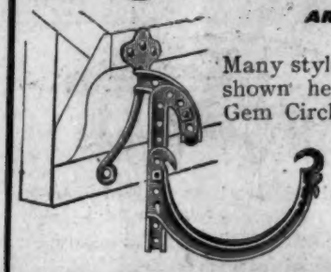

Many styles to suit any building. The Royal Circle shown herewith is an improvement on the old Gem Circle. Send for free sample.

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Warerooms and Factory 100 to 114 Broad Street

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Most practical for sheet metal workers, tinners plumbers, hardware stores, blacksmiths, carriage builders, etc.

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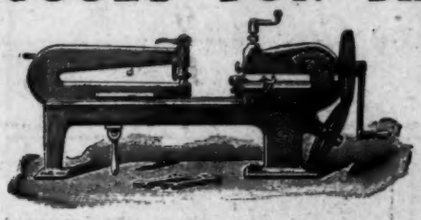

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THE WORK

for closing end of Eave Trough in corrugations, as shown herewith.

You can close an end much quicker, neater and cheaper than in any other way. When you cut a trough, you can put an end in both parts, thus making no waste.

The joint will not burst the end out. You can close old work from a ladder.

The form is made in five sizes, 3½, 4, 4½, 5 and 6. For sale by jobbers or tinning specialty houses.

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PORTABLE PUNCH No. 20

Made entirely of STEEL

Punches ¼ in. hole in ¼ in. and equivalent

Let us send you one on trial.

Write for circular and price of this and other Marvel Punches and Shears.

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Patent applied for.

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Plecker's *Corrugated* Expanding *Conductors*

Have no Cross Seams. Made of Galvanized Iron in ten-foot lengths.

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Fixtures and Ornaments
STATIC MACHINES
We Can SAVE YOU MONEY. WRITE US for price and territory.

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PERFORATED METALS
OF EVERY DESCRIPTION AND FOR ALL PURPOSES
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One of the Many Testimonials From Scholars of This School

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We teach pattern cutting from the first lesson, so that you can apply them in your every day shop work. Our system of teaching is as plain as it is possible to make it. Anyone who is willing to apply himself to study during spare moments, will have no difficulty in mastering our hardest problems.

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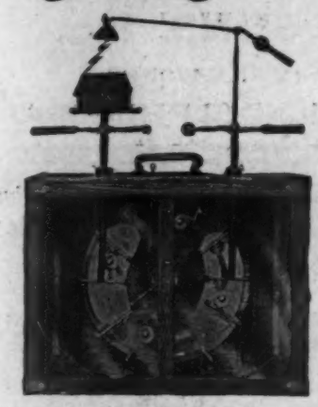

We loan these machines to our customers without charge.
Absolutely Convincing.
We manufacture all kinds of Cable and Section Lightning Rods. Get Our Literature.
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A Creditable Line for Honest Men
Dealers: There is big money in handling the
Look for this brand — Barnett SYSTEM — Reliable by test
PURE COPPER CABLE
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OVER 98% PURE COPPER. Scientifically made in every respect. Permanent durability characterizes all our fixtures and ornaments. Absolute protection positively guaranteed.
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The QUALITY of BARNETT RODS is guaranteed to the purchaser. Sold only thru dealers and reliable agents. Our rods are in demand and there is good profit in handling them.
It should be greatly to your interests to know what you can do with our line. Investigate our agency proposition for this season.
DO IT NOW! Write at once for Catalog and booklet explaining the BARNETT SYSTEM, and prices.

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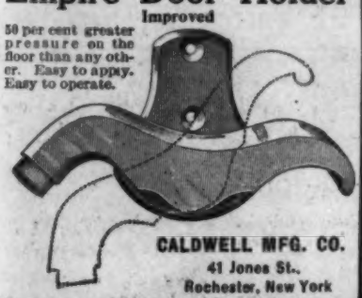
Empire Door Holder
Improved
50 per cent greater pressure on the floor than any other. Easy to apply. Easy to operate.



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99 87/100 PURE

That is what a sample of the copper wire tested that goes into our famous Copper Cable Lightning Rod. We want to send you a sample and quote you prices on the best goods there are on the market at a price that will surprise you. We loan you one of our improved static machines with first order for 2,000 feet. Also furnish 25 year guarantees. Write today for agency to

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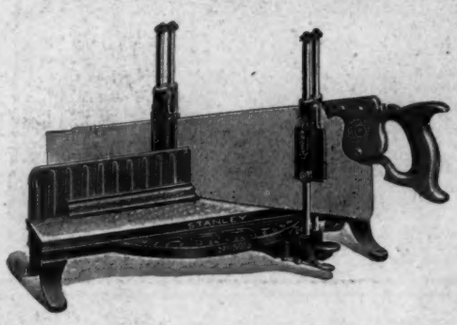
MANUFACTURE
A Full Line of Horse Nails
Send for Catalogue, Prices & Samples

STANLEY'S NEW MITRE BOX



A Strong and Accurate Tool at a moderate price.

We recommend this box as being thoroughly reliable in every respect.

No. 50½ Without Saw $6.50
No. 60½ With 20 in. Back Saw . . 9.50

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SAWS, TOOLS AND FILES

MADE SOLD USED **ON MERIT**

AND THE CONFIDENCE PLACED IN THE QUALITY AND EFFICIENCY OF THE DISSTON BRAND SHALL BE AS WELL-DESERVED IN THE FUTURE AS IT HAS BEEN DURING THE PAST

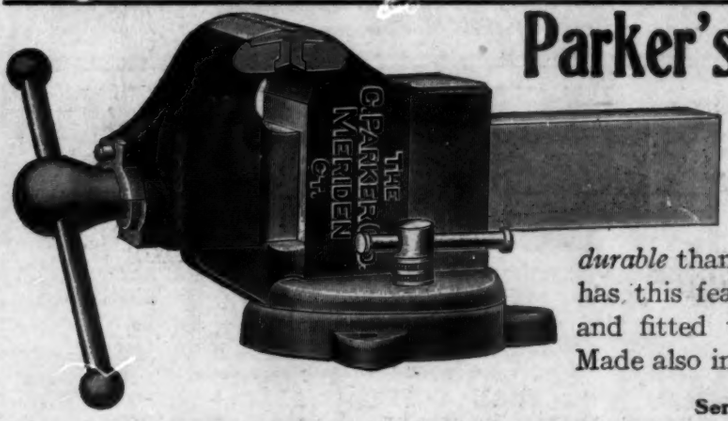
SIXTY-NINE YEARS

HENRY DISSTON & SONS, Inc.

KEYSTONE SAW, TOOL, STEEL AND FILE WORKS.

PHILADELPHIA, PA.

Parker's Reinforced Slide Solid Jaw Swivel Vise



This Vise is made of Semi-Steel for Extra Heavy Work. It has a Reinforced Sliding Jaw which makes it *much stronger* and *more durable* than other vises. No other vise made has this feature. The Steel Faces are milled and fitted to the Jaws and are Renewable. Made also in Stationary style.

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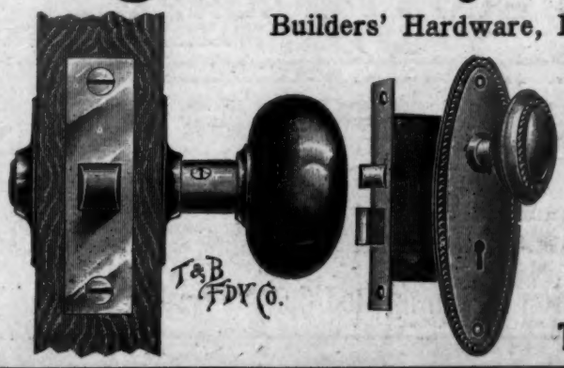
Light Gray Iron Castings

Builders' Hardware, Dampers and Damper Clips.

OIL AND GAS STOVES, FURNACE LAMPS, MOLASSES GATES, LETTER BOXES, HARDWARE SPECIALTIES.



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Measuring Tapes

are made in every conceivable variety, to suit every purse and purpose, but all of the same superior quality.

¶ Our extensive advertising creates a demand, that every progressive dealer should be able to satisfy.

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"Yankee Tools"

Are Without Equal in Quality or Efficiency in Practical Use

New Styles—Have You Seen Them?

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RATCHET "SCREW EYE" DRIVER, NOS. 80 and 81

ASK YOUR JOBBER ABOUT THEM

Send for "Yankee" Tool Catalog.

North Bros. Mfg. Co., Philadelphia

NOTE ITS SIMPLICITY

Automatic Swivel Vise

Locks Automatically by Tightening the Jaws

Saves 20 per cent Vise Labor

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IT WILL SELL AND SELL READILY.

COMBINATION PIPE AND NUT WRENCH

A Strong and Serviceable Combination, which takes the place of two tools

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The Head, Bar and Shank—one-piece steel forging. Made of the best materials—the parts are interchangeable. Write for Catalog of Wrenches of all Descriptions.

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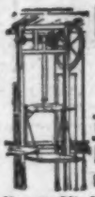

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Daniel Stern, Publisher and Proprietor

355 Dearborn Street, CHICAGO

Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars for one year's subscription, or 50 cents in case we decide to discontinue.

NAME .....

ADDRESS .....

TOWN .....

STATE .....

NAILS THAT NEVER RUST

KEYSTONE BRAND GALVANIZED NAILS

CUT OR WIRE

Evenly Coated Perfectly Separated

KEYSTONE NAIL CO., Pittsburgh, Pa.

Send for Catalogue and Prices.

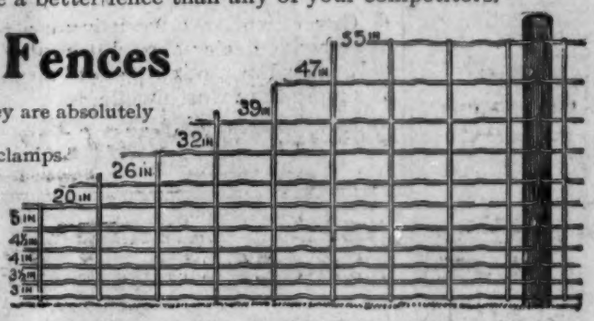
For a Bigger Fence Business

It is absolutely necessary that you handle a better fence than any of your competitors.

"Pittsburgh Perfect" Fences

are so far ahead of any other on the market that they are absolutely without competition.

This fence is **Electrically Welded**—it has no wraps or clamps to hold moisture and **cannot rust.** It is the strongest fence made and will curb the most powerful beasts. It can be adjusted to uneven ground—as a perfect fence it is in a class by itself.



WRITE US FOR PARTICULARS TODAY

PITTSBURGH STEEL CO., Pittsburgh, Pa.

PELOUZE Improved Family Scales

with Extra Large Dial—New Artistic Base

They can be instantly adjusted for plate, basket or scoop.

CAPACITY

24 pounds by ounces

No. E90 Steel Platform
No. 90½ Tile Platform

The Pelouze Scales are invaluable to proper cooking, indispensable in preserving. They keep check on your purchases. Soon pay for themselves. No weights to get lost. Absolutely automatic. These *Scales* are beautifully finished in black enamel and are artistically ornamented. Extra Large Dial with silver center and gold border. Very attractive. Made of cold rolled steel.

No. T95 Tin Scoop
No. B95 Brass Scoop

Dealers should specify PELOUZE Scales in ordering from their jobber. Send for Catalog K." 40 Styles Counter, Market, Postal and Confectionery Scales, Spring Balances, etc.

PELOUZE SCALE & MFG. CO.
405-413 Ohio Street, CHICAGO

We Manufacture 12 and 14 Mesh

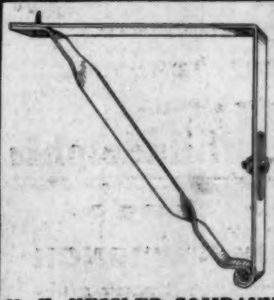
ALUMINOID

in all widths made of 33 wire.

Heavy in 28 wire.

SEND FOR SAMPLES.

NATIONAL WIRE CLOTH CO., Niles, Mich.



SYRACUSE STEEL SINK } **Bracket**

Plain, Galvanized and Nickel

Light in Weight
Neat in Appearance
Stronger than Cast Iron

This bracket is detachable and much more easily placed than the ordinary cast bracket. Descriptive circulars and prices on application.

Manufactured by

H. E. HESSLER COMPANY, 502 N. Salina St., Syracuse, N. Y.

It Will Pay You

to illustrate your advertisements in your local papers. A sheet of comic advertising cuts sent on application.

These cuts are furnished with catchlines showing their application to the hardware, stove and tinners' trades.

Address

DANIEL STERN

358 Dearborn St., - CHICAGO

Washing Machines
Are Staple—
They are good
Things to use
Which makes
Them good
To sell—
That is if
They are
Reliable
Machines.

The White Line
Of Washing
Machines are
Reliable—
Fully guaranteed—
Safe to buy—
And safe
To sell.
Do you
Handle
Them?

White Lily Mfg. Co.
1500 Rockingham Road, Davenport, Iowa.

MORE MONEY IN RAZORS.

THE "ESKILSTUNA" RAZOR

(Awarded medals at every exposition.)

That I let you have at $1.00 is better than any $1.75 or $2.00 razor on the market.

No razor made can surpass it in quality, nor is there one that will give greater satisfaction.

Let me quote you price on a single razor, a dozen, or a gross, assorted. Special terms to salesmen and agents.

J. S. STROM, Importer, 7016 South Hermitage Avenue, CHICAGO, ILL.

Sold to but one dealer in a town

Something New
Something Different
Something Better

And besides a

"Square Deal"

to every dealer and consumer as its name implies.

It's a washing machine of course — we couldn't make anything else if we tried, but specialization makes perfect.—See the point? —Perfectly finished goods as you like them, certainly.

H. F. BRAMMER MFG. CO.

DAVENPORT, - IOWA

Write us today for the agency

The LENOX HOTEL

BUFFALO

Modern High Grade Fireproof

OUR OWN RAPID ELECTRIC CARRIAGES EXCLUSIVELY FOR PATRONS, operate continuously every few minutes from Hotel through Business District and to all Depots for principal trains.

EUROPEAN PLAN.

Rates $1.50 per day and upward.

GEORGE DUCHSCHERER, Prop.

TRIPLEX BUFFS

will save you 50% of the present expense in your Plating and Polishing Departments.

They wear twice as long.

Save 20% in composition.

Can be used for cutting or coloring up.

Can be remade to original sizes when worn down.

Stove manufacturers and others highly recommend them.

We are the sole manufacturers.

Our TWO-BAR SILVERITE ANODE is made in any length desired and is a light sound anode, readily handled and easily cleaned.

Important Notice—Any folded buff not stamped with our trade mark "Triplex" used or sold is an infringement on our license patent and our rights in this respect will be strictly enforced.

Zucker & Levett & Loeb Co. 516-524 West 25th Street NEW YORK CITY

THE AMERICAN ARTISAN ADVERTISING MANUAL

A NEW ONE, JUST OUT. The most complete and most valuable treatise upon the subject of advertising as it is applicable to the retail merchant ever published. ::: NO DEALER CAN AFFORD TO BE WITHOUT IT.

Price $3.50 Per Copy. For Sale by Your Bookseller or By

DANIEL STERN, Publisher, 355 Dearborn Street, CHICAGO, ILL.

Hardware Shelving, Shelf Boxes, Screw Cases, Etc.

SEND FOR BOOKLET

W. B. Heller & Co.

Montpelier, Ohio

Complete Stock
Carried at our Branch

220-226 Wyandotte Street
KANSAS CITY, MO.

— SHELVING —
WARREN SYSTEM
SELF PAYING
HARDWARE STORE EQUIPMENT
IN INTERCHANGEABLE SECTIONS
& SCREW, BOLT & GUN CASES.
J. D. WARREN MFG. CO. CHICAGO U.S.A.

INTERCHANGEABLE
LOCK-CORNER SHELF BOXES
For the Hardware Trade.
THE A. H. GREEN CO.,
97-101 Warren St., NEW YORK.

BOOKS BY MAIL

☞ The publisher of THE AMERICAN ARTISAN will take pleasure in supplying Books, of whatever character, at catalogue prices, prepaid by mail, to any address, on receipt of price. The following are in lines especially represented by this journal.

—NO BOOKS EXCHANGED—

HOT WATER MANUAL.

With Information and Suggestions on the best methods of Heating Public, Private and Horticultural Buildings. Treatise on the High and Low Pressure Systems, Bath Apparatus, Hot Water Supply for Public Institutions. Duplicate Boilers, Radiators, Laundry Drying Stoves, Swimming Baths, Turkish Baths. Causes of and Hints to Prevent Failure. By Walter Jones. Price, $3.50.

THE MANUAL OF BUSINESS.

By S. P. Johnston. Contains 263 pages, and is well indexed. By perusing its pages one can tell at a glance correct business forms for business and legal instruments of all character, and secure authoritative advice on discounts, property laws, contracts, penmanship, postal regulations, debts and collections, bookkeeping, transportation, parliamentary laws, etc. If you strike an unknown business term this book will define it for you. If you want the meaning of a business abbreviation refer to this book, which also helps in many other ways around your store. The price is $3.50.

MANUAL OF RECEIPTS.

By Sidney P. Johnston. Contains 241 pages, giving 1,718 receipts for soldering, polishing, painting, hardening, writing on, nickeling, whitening, ungilding, varnishing, turning, testing, cleaning, mending, marbling, lacquering, japanning, cementing, coating, decorating, graining, annealing and amalgamating the various metals. It occupies a field of its own. Price, $3.50.

DANIEL STERN,

Publisher and Bookseller
355 Dearborn St., CHICAGO

STURGES & BURN MFG. CO. CHICAGO

Sell the Cans With a Reputation

Every customer who has used Sturges Milk Cans, will demand them whenever he needs more cans because he knows they are the best the market affords.

He has found out by experience that they stand the hard knocks and rough handling.

He appreciates the smoothly soldered seams, making perfect washing easy.

STURGES MILK CANS

are built by expert mechanics, of high quality steel plates, heavily tinned and retinned in our own shop.

They are built for efficient service.

They always give satisfaction.

Send for catalog 75 describing many styles and sizes and learn about the dealers' profit.

STURGES & BURN MFG. CO.

FACTORY—Harrison, Green and Peoria Sts. OFFICE—285 So. Green St, Chicago, Ill.

The BUFFALO MFG. CO.

BUFFALO, N. Y.

High Grade Standard Metalware

These Are ALL Good Sellers

Chafing Dishes
Table Kettles and Stands
Coffee Extractors
Water Filters
Nursery Chests
Crumb Trays and Scrapers
Tea and Bar Urns

Bathroom Fixtures

Wine Coolers
Water Coolers
Baking Dishes
Coal Vases and Hods
Candlesticks
Cuspidors
Match Safes
5 O'Clock Teas
Jardinieres, etc., etc.

Write for Our Illustrated Catalogue Today

A TRIAL ORDER WILL CONVINCE YOU

BRANCH OFFICES

18 Warren Street	*New York*
1490 Arapahoe Street	*Denver, Colorado*
40 Dearborn Street	*Chicago*
51 Young Street	*Toronto, Canada*

It's all in Our dasher

THE SANITARY FREEZER IN USE IN LEADING HOSPITALS

The Original ALL METAL "POLAR STAR"

No Other "Just As Good" and They Can't Make 'Em Better.

Best materials procurable enter into their construction.

They are purposefully correct.

They are the most inexpensive good articles of their kind on the market.

They allow a good margin of profit to jobber and dealer.

The consumer gets his money's worth—and more.

Write for Full Descriptions and Prices.

Smith & Hemenway Co.

108-110 Duane Street, NEW YORK, N. Y.

AUTOMATIC SANITARY ICE CREAM FREEZER

The FREEZER that has made the Sweat-making, Back-breaking, Crank-Freezer Out-Of-Date.

¶ There is not another Freezer like it on the market. ¶ It has no dasher, crank nor gears to get out of order and is so easy to operate that a mere child can do the freezing. ¶ Its cylinder is rust-proof and absolutely sanitary, being made of white enameled steel; inside cover of aluminum. ¶ This Freezer is made with 1, 2, 3 or 4 cylinders of 1 to 4 quarts capacity each. ¶ It will freeze cream in five minutes. ¶ Send for descriptive matter and prices.

The New England Enameling Co.

MIDDLETOWN and PORTLAND, CONN.

H. GINSBURG,
Sales Agt., 736 Broadway, New York

YANKEE [All Steel] DAMPERS and CLIPS

FOR SMOKE PIPE AND FURNACE PIPE

THE S. M. HOWES COMPANY. 40-46 Union St., BOSTON

Cleaver and Tenderer
5—Grades

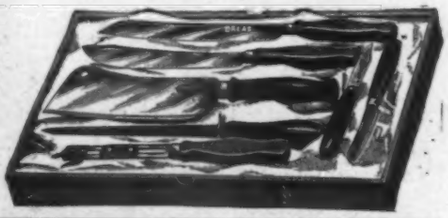
No. 501
"SURE-CUT"
Can Opener and Cap Lifter

We manufacture a large line of Bread, Butcher, Carving and Paring Knives, Can Openers, Family Cleavers, Shoe and Putty Knives, Wall Scrapers, etc.

WRITE FOR PRICES

IRA F. WHITE & SON CO.
NEWARK, N. J.

SPECIAL KITCHEN SETS



THAT PAPER IS THE CHEAPEST WHICH BRINGS THE BEST RESULTS IN PROPORTION TO ITS RATE, NO MATTER WHAT THAT RATE MAY BE.

PACKED IN KEGS WITH RED HEADS

To describe the manufacture of

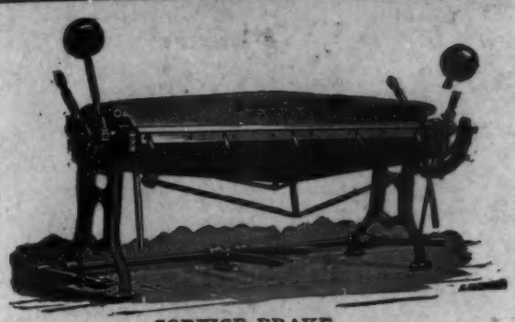
JUNIATA HORSE SHOES

is to write the history of iron and steel making, thus showing the results of ages of experience as embodied in these good Shoes.

This experience is first brought to bear in digging the ore from the ground, and then follows through the furnaces, and the many operations of shaping, to the finished Shoe. Each process is under the keen eye and is guided by the hands of painstaking and highly-skilled men, whose lives have been spent each in his particular line of work.

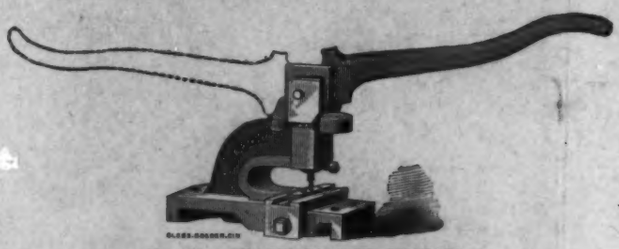
The united result, up to the time we offer for sale the finished keg of shoes, is that of the highest and best that good workmen can produce.

Made of Steel or Iron, in Standard Sizes and Patterns, adapted to both city and country use.



CORNICE BRAKE

No. 59. HAND LEVER SHEARS
Will cut No. 16 Gauge material, a swath of 3½-inch.
Weight, 20 pounds.



No. 61. HAND LEVER PUNCH
Will punch $\frac{3}{16}$-inch holes in ¼-inch iron.

The J. M. Robinson Mfg. Co.
3282 to 3288 Spring Grove Avenue
CINCINNATI, O., U.S.A.

Dealers! This Is For You!

A new book, just published, which should have a place in every store:

THE AMERICAN ARTISAN ADVERTISING MANUAL

This is a book worth many times its original cost to any dealer who advertises. In its 278 pages there are exactly 228 illustrations of advertisements that have actually been inserted by dealers all over the country in their local papers.

The advertisements are all comprehensively criticised—their weaknesses indicated—their strong features favorably commented on to the end that any dealer by applying the countless hints and suggestions to his own copy can greatly increase the effectiveness of his advertisements.

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Is there **any** question concerning your advertising upon which you would like expert opinion? THE AMERICAN ARTISAN ADVERTISING MANUAL will supply it.

It is an ever-ready reference book and no enterprising dealer should be without it.

The book is elegantly gotten up in a durable manner nd is cloth bound.

The price is $3.50 per copy. For sale by your book seller
OR BY

DANIEL STERN, PUBLISHER,

355 Dearborn Street Chicago, Illinois.

THE RIFLE OF TODAY

Easy Take-Down

Write for Advance Catalog
of "Standard" Rifles now. It will show you why you should place an order with your jobber when these rifles are ready to put on the market about JULY 1ST

SELF-OPERATING HAND-OPERATED

"STANDARD" {HIGH POWER REPEATING HAMMERLESS} RIFLES

Hand-operating action so easy it doesn't disturb the aim in the slightest. Automatic action always under perfect adjustment and control. **Ready about July 1st.** Write for catalog NOW. Order through your jobber THEN.

STANDARD ARMS CO., 133 F Street, Wilmington, Del., U. S. A.

PACKED IN KEGS WITH RED HEADS

To describe the manufacture of

JUNIATA HORSE SHOES

is to write the history of iron and steel making, thus showing the results of ages of experience as embodied in these good Shoes.

This experience is first brought to bear in digging the ore from the ground, and then follows through the furnaces, and the many operations of shaping, to the finished Shoe. Each process is under the keen eye and is guided by the hands of painstaking and highly-skilled men, whose lives have been spent each in his particular line of work.

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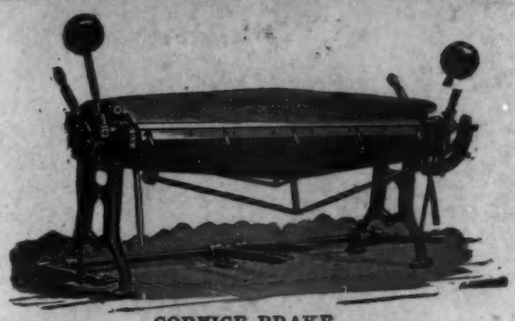

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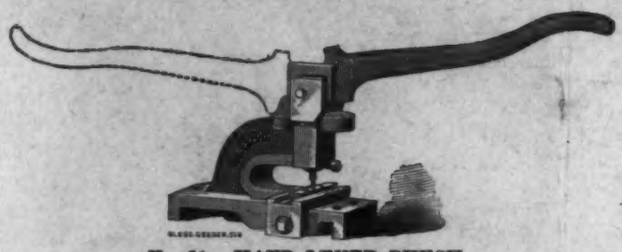

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Hand-operating action so easy it doesn't disturb the aim in the slightest. Automatic action always under perfect adjustment and control. Ready about July 1st. Write for catalog NOW. Order through your jobber THEN.

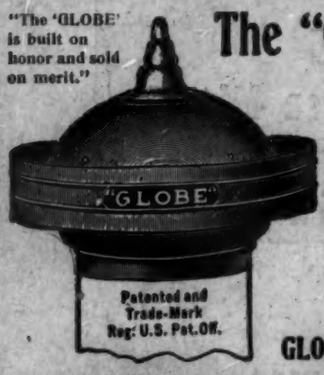
STANDARD ARMS CO., 133 F Street, Wilmington, Del., U. S. A.

THE IMPROVED ONE-PIECE MITER

This miter is made absolutely correct, true to shape, size and bead, and has the easiest connecting slip joint. Will save your time and temper. In case your supply house cannot furnish them send your order direct to the

J. E. WHITACRE MFG. CO.
ROCKFORD, ILL.
Manufacturers of Sheet Metal Specialties.

"The 'GLOBE' is built on honor and sold on merit."



The "GLOBE" Ventilator

in COPPER, GALVANIZED IRON and with Glass Tops for Skylight purposes.

ABSOLUTELY STORM PROOF
For Perfectly Ventilating Schools, Churches, Halls, Mills, Factory and Audience Rooms of Every Character
SMOKY CHIMNEYS CURED
"GLOBE VENTILATED RIDGING"
Send for Pamphlet
MANUFACTURED BY
GLOBE VENTILATOR CO., Troy, N. Y.

The ECLIPSE Nested Stove Pipe Thimble

Saves 80 per cent of room.
Stronger than a hand-made riveted thimble.
Always Ready to hook together.
The Lug is always on top and passes through two slots then tied. Does not interfere with the entering stove pipe.

The ECLIPSE Nested Stove Pipe Thimble is made of Galvanized Iron in sizes of 5, 6 and 7 inch.
Manufacturers of Pieced Tinware and all Styles of Flour Sifters.
STUBER & KUCK, Peoria, Ill.

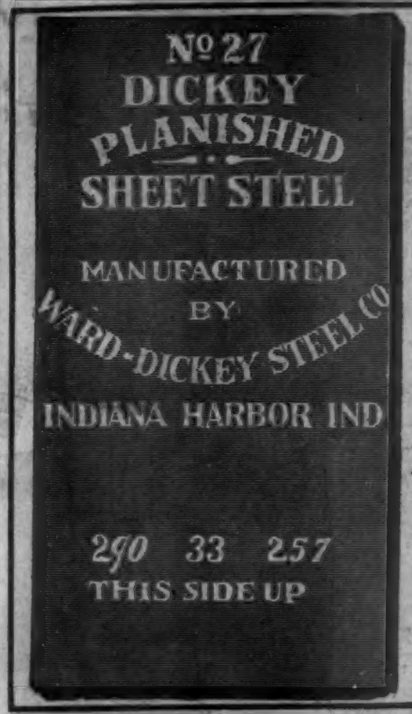
WE CAN'T AFFORD
to allow the quality of
SCOTT'S EXTRA COATED
Hammered Open Hearth
ROOFING TIN
to deteriorate. It has been the standard of high quality for over 25 years and that reputation will be faithfully guarded, so you take no risk in buying it.

IT'S MADE RIGHT—AND WEARS RIGHT

FOLLANSBEE BROTHERS' COMPANY, PITTSBURGH.

TRADE MARK SCOTT'S IC EXTRA COATED REGISTERED HAMMERED OPEN HEARTH

Only American Makers Hammered Open Hearth Roofing Tin.



Of what use will the Panama Canal be to the United States, with no merchant ships to sail it?

It would cost less to build another navy and station it in the Pacific —"Johnny on the Spot."

A FAST SELLING ITEM
and one which leaves the dealer a good profit is our

BERLIN KETTLE

Made with tin or enameled cover.
Our line consists of over 500 fast selling items.

Like all our goods it is strictly first class and sells at a reasonable price.

WRITE FOR CATALOG.
Star ★ Enameling & Stamping Co., PITTSBURGH, PA.

Drink Pure Water

The **No. 50 Star Pump** shown here will positively purify the water in any well or cistern in a short time.

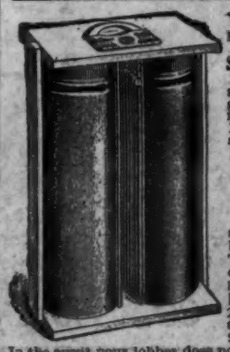
This purifying feature alone makes it the only pump fit to put in any well where the water is used for household purposes, for it will surely save its cost in the doctor's bill many times over.

As it is made of No. 24 gauge galvanized iron it is a very substantial and handsome outfit, and will last for years.

Our line of purifying pumps is very complete. So is our line of Galvanized Chain Pump Curbs and Tubing.

Ask your jobber for Star Pumps.

Star Bucket Pump Company
ST. LOUIS, MO.



YALE
Russia finish, pat. Lock
STOVE PIPE
It is made of a very high grade of uniform color Blue Polished Steel and iscoated to prevent rusting. Made in all sizes. Packed twenty-five and fifty joints to crate. For sale by the jobbing Hardware Trade throughout the United States. Mfg. by HEMP & CO. 2nd and Chouteau Avenue, ST. LOUIS.

In the event your jobber does not handle this pipe, send your inquiries to us.

The "CENTENNIAL"
RAIN-WATER-CUT-OFF

The strongest, most durable and cheapest CUT-OFF on the market.

The only single cut-off made to fit **Corrugated** and plain pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers.

Manufactured only by
The Sullivan-Geiger Co.
10 & 21 E. South Street, Indianapolis, In.